

**REPORT**  
OF THE  
**SEVENTEENTH INDUSTRIAL EXHIBITION**  
MECHANICS' INSTITUTE,  
SAN FRANCISCO.















REPORT  
OF THE  
SEVENTEENTH  
INDUSTRIAL EXHIBITION  
OF THE  
MECHANICS' INSTITUTE  
OF THE  
CITY OF SAN FRANCISCO,

HELD AT THE NEW MECHANICS' PAVILION, COR. OF LARKIN AND HAYES  
STREETS, FROM THE 15TH OF AUGUST TO THE 23D OF  
SEPTEMBER, 1882.



SAN FRANCISCO :  
P. J. THOMAS, PRINTER, 505 CLAY STREET.  
1883.



# BOARD OF MANAGERS

OF THE

## SEVENTEENTH INDUSTRIAL EXHIBITION,

1882.

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P. B. CORNWALL, President,	-	{ Office Black Diamond Coal Co. S. E. cor. Spear and Folsom sts.
A. W. STARBIRD, Vice-President,	-	- 101 Market street
J. A. BAUER, Treasurer,	-	- 101 Post street
RICHARD GRAY,	-	{ C. P. R. R. Building, Fourth and Townsend streets, Room 22.
C. WATERHOUSE,	-	- 14, 16, 18 and 20 Beale street
D. A. MACDONALD,	-	- 217 Spear street
A. R. WELLS,	-	Mechanics' Mill, cor. Fremont and Mission streets
JAMES SPIERS,	-	- 135 Fremont street
DAVID KERR,	-	- 49 Beale street
C. F. BASSETT,	-	- 304 Davis street
J. R. WILCOX,	-	{ Cal. Savings and Loan Society, N. W. cor. Powell and Eddy sts.
GEO. H. HOPPS,	-	- 429 Pine street
EDWIN FRETWELL,	-	- 218 Fremont street
GEO. SPAULDING,	-	- 414 Clay street
J. H. CULVER, Secretary,	-	Office of the Exhibition, 27 Post street
J. H. GILMORE, Superintendent,	-	- 27 Post street

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## STANDING COMMITTEES.

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<i>Auditing</i> .....	WATERHOUSE, KERR, GRAY.
<i>Building</i> .....	WELLS, WILCOX, MACDONALD.
<i>Circulars and Classification</i> .....	BASSETT, STARBIRD, HOPPS.
<i>Printing and Advertising</i> ....	SPAULDING, BASSETT, FRETWELL.
<i>Power and Machinery</i> ....	SPIERS, WELLS, KERR.
<i>Rules, Regulations and Awards</i> .....	GRAY, STARBIRD, SPIERS.
<i>Tickets and Admissions</i> .....	FRETWELL, BASSETT, KERR.
<i>Music and Decorations</i> .....	BAUER, HOPPS, STARBIRD.
<i>Privileges</i> .....	KERR, WATERHOUSE, MACDONALD.
<i>Location</i> .....	MACDONALD, WELLS, SPAULDING.
<i>Police</i> .....	SPAULDING, MACDONALD, FRETWELL.
<i>Horticulture</i> .....	STARBIRD, HOPPS, WILCOX.
<i>Gas and Water</i> .....	WILCOX, SPIERS, WATERHOUSE.
<i>Art</i> .....	HOPPS, SPAULDING, GRAY.

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REPORT OF THE BOARD OF MANAGERS  
OF THE  
SEVENTEENTH  
INDUSTRIAL EXHIBITION  
OF THE  
MECHANICS' INSTITUTE, 1882.

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*To the Board of Trustees of the Mechanics' Institute:*

It is with much gratification that we, the Managers of the Seventeenth Industrial Exhibition of your Society, present this report which gives in detail the various items of receipts and expenditures and the transactions of the different Committees of Award, and also of the Standing Committees of the Board.

We received from your honorable body in July last the new Pavilion for the purpose of giving another exhibition of the products of this Coast, which we now return in good condition and well adapted for rental for various purposes during the winter. The financial result, as shown by the report of the Treasurer, is a net gain to the Institute of near \$39,000, an amount greatly in excess of what the most sanguine friends of the Society anticipated. While the articles displayed were varied and excellent, and in some cases exceedingly interesting, showing marked advancement by our State, particularly in the manufacture of iron-working machinery and agricultural implements, yet our Fairs are still far from what we desire, and what they should be, to become, as they ought, “*a general and comprehensive exposition of the natural products and manufactured articles of the Pacific Coast.*”

Next year will probably witness a great influx of visitors from the East to attend the Triennial Conclave of Knights Templar, to be held in this city in August, and it behooves the Institute and our citizens to make the exhibition at that time as full and complete as possible, as at no time for years to come will another such opportunity occur for us to display to visitors of all lands our progress, our capabilities and the great advantage of this State for investment and permanent residence.

# TREASURER'S STATEMENT OF TICKETS SOLD, AND RECEIPTS AT THE DOOR.

MECHANICS' INSTITUTE, September 25th, 1882.

To the President and Board of Managers of the Seventeenth Industrial Exhibition:

GENTLEMEN:—I herewith submit my Report of the Receipts at the door, on account of the Seventeenth Industrial Exhibition, showing each class of tickets sold.

1882.	DOUBLE SEASON TICKETS.	SINGLE SEASON TICKETS.	CHILDREN'S SEASON TICKETS.	ADULT SINGLE ADMISSION TICKETS.	CHILDREN'S SINGLE ADMISSION TICKETS.	AMOUNT.
August 15.....	419	67	97	319	42	\$2,611 50
" 16.....	276	67	53	437	40	1,889 00
" 17.....	282	38	44	889	68	1,951 50
" 18.....	241	32	30	806	97	1,773 25
" 19.....	359	61	32	2716	525	3,515 25
" 21.....	126	19	5	1122	104	1,281 50
" 22.....	108	23	12	1535	134	1,428 00
" 23.....	106	10	6	1789	163	1,504 25
" 24.....	52	18	7	1769	156	1,248 00
" 25.....	56	5	6	1810	269	1,276 25
" 26.....	65	12	3	6028	1312	3,707 50
" 28.....	22	.....	4	1569	146	937 00
" 29.....	10	5	1	1804	127	1,000 25
" 30.....	12	3	.....	1844	131	1,023 75
" 31.....	3	2	.....	1766	178	948 50
September 1.....	11	2	1	1880	261	1,067 75
" 2.....	7	1	.....	5063	1214	2,873 00
" 4.....	2	.....	.....	1459	174	783 00
" 5.....	1	.....	.....	1644	158	866 50
" 6.....	5	.....	2	1959	170	1,050 00
" 7.....	2	1	.....	1916	197	1,020 25
" 8.....	2	1	.....	1921	230	1,031 00
" 9.....	.....	.....	.....	4541	1024	2,526 50
" 11.....	.....	.....	.....	1426	171	755 75
" 12.....	.....	.....	.....	1695	215	901 25
" 13.....	.....	.....	.....	3215	361	1,697 75
" 14.....	.....	.....	.....	1920	273	1,028 25
" 15.....	.....	.....	.....	2056	310	1,105 50
" 16.....	.....	.....	.....	3119	722	1,740 00
" 18.....	.....	.....	.....	633	60	331 50
" 19.....	.....	.....	.....	785	67	409 25
" 20.....	.....	.....	.....	1299	119	679 25
" 21.....	.....	.....	.....	947	109	500 75
" 22.....	.....	.....	.....	1334	138	701 50
" 23.....	.....	.....	.....	2796	420	1,503 00
	2167	367	303	67611	9885	\$48,667 25
Less Discount on 1 Single Season Ticket.....						1 50
Total.....						\$48,665 75

Yours respectfully,

J. A. BAUER, Treasurer.



ACCOUNT OF TICKETS SOLD.

SEVENTEENTH INDUSTRIAL EXHIBITION 1882.	DOUBLE SEASON \$5 00	SINGLE SEASON \$3 00	CHILD' N'S SEASON \$1 50	APPRENTICES' SEASON \$1 50	ADULT SINGLE ADMISSION 50 cts.	CHILDREN SINGLE ADMISSION 25 cts.	EXCURSION 25 cts.	EXCURSION 12½ cts.	AMOUNT.
Ticket Office...	2167	367	303	.....	67,611	9885	2548	513	\$49,368 35
Outside Sales...	984	123	.....	431	.....	.....	.....	.....	5,935 50
Total.....									\$55,303 85
Deduct Commission and Discount.....									183 70
" Amount of Olympic Club Benefit.....									265 59
									449 29
									\$54,854 56

RECAPITULATION.

3,151 Double Season Tickets @ \$5 00.....	\$15,755 00
490 Single " " @ 3 00.....	1,460 00
303 Children " " @ 1 50.....	454 50
431 Apprentice " " @ 1 50.....	646 50
67,611 Adult Single Admission Tickets @ 50 cts.....	33,805 50
9,885 Children " " @ 25 cts.....	2,471 25
2,548 Excursion Tickets @ 25 cts.....	637 00
513 Excursion Tickets @ 12½ cts.....	64 10
	\$55,303 85
DEDUCT—Commission, Discount and Benefit.....	449 29
Net Receipts from Sale of Tickets.....	\$54,854 56

Respectfully submitted,

EDWIN FRETWELL,  
C. F. BASSETT,  
DAVID KERR,

}

Ticket Committee.

## REPORT OF THE FINANCE COMMITTEE.

## EXPENDITURES.

ADVERTISING—Abend Post.....	\$ 14 00
Advance.....	5 00
Alta.....	58 75
Argonaut.....	10 00
Breeder and Sportsman.....	5 00
Brown, David, sundry papers.....	89 00
Boys' Journal.....	3 00
Bulletin (Daily).....	89 70
Bulletin (Weekly).....	3 00
Californian.....	2 50
Call (Daily).....	85 50
Call (Weekly).....	6 00
California Journal.....	4 00
California Demokrat.....	14 00
California Grocer.....	4 00
Chronicle, S. F. (Daily).....	90 75
Chronicle, S. F. (Weekly).....	5 00
City Argus.....	5 00
Cheever, S. G., sundry papers.....	20 00
Commercial Ledger.....	5 00
Courier de San Francisco.....	10 00
Country Merchant.....	4 00
Daily Exchange.....	15 00
Daily Report.....	15 00
Dramatic Brevities.....	5 00
Dunphy & Co., Bill Posting.....	105 00
Elevator.....	4 00
Evening Post.....	60 00
Examiner.....	90 00
Fair Daily.....	150 00
Fischer & Co.....	10 00
Figaro.....	10 00
Footlight.....	5 00
Fraternal Index.....	18 00
Golden Gate.....	4 00
Hayes Valley Advertiser.....	4 00
Hebrew Observer.....	8 00
Hotel Gazette.....	6 00
Humorist.....	5 00
Jewish Times.....	4 00
Jewish Progress.....	5 00
Journal of Commerce.....	19 00
<i>Carried forward</i> .....	<u>\$1,075 20</u>

<i>Brought forward</i> .....	\$1,075 20	
L. Elveza. ....	4 00	
Law Journal .....	10 00	
Merchant .....	6 00	
Monitor .....	4 00	
News Letter .....	10 00	
Newspaper Union.....	8 00	
Pacific Churchman...	3 00	
Pacific School Journal .....	4 00	
Pacific Pilot. ....	3 00	
People's Guide.....	5 00	
Postal Index.....	5 00	
Public Opinion.....	5 00	
Resources of California.....	10 00	
Rural Press.....	12 00	
Sanderson, P.....	20 00	
Scientific Press .....	12 00	
Spirit of the Times.....	10 00	
Watchman.....	6 00	
Wine Journal .....	4 00	
	<hr/>	\$1,216 20
ART DEPARTMENT—Briderson, W., cartage and labor...\$	59 25	
Burkhardt, M., repairs.....	1 50	
Cohen, H., cartage and labor.....	39 00	
Davis, J. H., labor.....	7 00	
Gump, S. & G., repairs to frame.....	7 00	
Helmken & Co., hardware.....	7 90	
Hoff & Preble, horse hire....	6 00	
Hughes, J., labor.....	4 00	
Hutchinson & Mann, insurance on pictures...	97 50	
Jorgensen, C., labor.....	5 00	
Mongeoghainear, Paul, labor.....	30 25	
Stanton, A., labor.....	15 00	
Vanni, N., labor.....	17 50	
	<hr/>	\$296 90
DECORATION—Salaries to decorators.....\$	27 00	
Strauss, Levi & Co., cloth.....	91 05	
	<hr/>	\$118 05
EXPENSE—Cal. Electric Works, repairs to gong.....\$	3 90	
Carpenter work, mechanics and laborers.....	476 68	
Christiansen, injury to boy...	275 00	
Crocker, H. S. & Co., ticket punches.....	14 00	
	<hr/>	
<i>Carried forward</i> .....	\$ 769 58	



<i>Brought forward</i> ..	\$ 769 58
Corbett, P. J., horse hire .....	4 00
Dampf, Louis, broken frame.....	4 00
Enterprise Mill, lumber and mill-work.....	87 45
Figer Bros., brooms and dusters.....	15 00
Fuller, Geo. H. & Co., chairs . . . . .	14 00
Gas Fitting, gasfitters, plumbers and laborers.	275 87
Hopps & Sons, painting.....	54 00
Hughson, Geo. J., sprinkling streets.....	49 50
Iredale, A. S., cups and sprinklers.. . . .	3 00
Joost Bros., hardware.....	9 95
Josselyn & Co., ensigns.....	44 20
Miller, J. M., rent of show cases .....	24 75
Montague, W. W. & Co., cups.....	2 25
Neville & Co., repairing flags.....	9 00
Pacific Bell Telephone Co.....	35 90
Parkhurst, S. W., scales.....	35 70
Secretary, petty expenses .....	188 67
Starbird & Goldstone, lumber.....	304 67
Superintendent, petty expenses.....	58 50
Tweedale, T. S., janitors' expenses . . . . .	30 70
Wells, Russell & Co., lumber and mill-work...	29 08
Wilson, Horace, cartage.....	50

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\$2,050 27

HORTICULTURAL DEPARTMENT—Meyer, E., plants for	
decorating .....	\$ 15 00
Pouyal, A., plants and trees .....	15 00
Saywell, Thomas, plants and flowers.....	39 00
Woodward's Gardens, foliage, plants and ferns	15 00

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\$84 00

LIGHTING—California Electric Light Co .....	156 00
Central Gas Light Co., 790,800 feet gas, at	
\$1 80 . . . . .	1,423 45
Liddle & Kaeding, bamboo poles.. . . .	2 50
Whittier, Fuller & Co., alcohol.....	12 00
Yates & Co., alcohol.....	12 50

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\$1,606 45

MACHINERY—Allen, C. R., coal and screenings.....	\$ 423 30
Black Diamond Coal Co., coal and screenings.	134 05
Dunham, Carrigan & Co., engineers' supplies..	18 18
Goodyear Rubber Co., belting.....	32 04

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\$616 55

MUSIC—Schultz & Ballenberg, music 35 days . . . . . \$2,756 00

PREMIUMS—Britton & Rey, design and 200 diplomas . . \$ 100 00

Cash awards for flowers . . . . . 330 00

Cash awards for fruit . . . . . 75 00

Cash awards for paintings . . . . . 1,000 00

Kuner, A., engraving die for medal . . . . . 250 00

Muhs, A., 240 boxes for medals . . . . . 102 00

Thors, S., filling out diplomas . . . . . 24 50

Wenzel, Rothchild & Hadenfelt, new design, 29

gold, 136 silver, 82 bronze medals, and en-

graving same . . . . . 2,015 30

\$3,896 80

PRINTING—Allen, S. K., numbers for hat-room . . . . . 5 00

Bartling & Kimball, order books . . . . . 4 50

Barry, Baird & Co., notices, cards, etc . . . . . 16 50

Britton & Rey, envelopes . . . . . 24 00

Crocker, H. S. & Co., identifying tickets . . . . . 300 00

Cubery & Co., circulars, etc . . . . . 17 75

Eastman, Frank & Co . . . . . 77 00

Francis & Valentine, posters and show cards . . 116 50

Germain, D., tickets, cards, etc . . . . . 49 50

Gordon, C. W., applications for space . . . . . 14 50

Murdock, C. A. & Co., premium list and tickets 133 65

Oliver, H., autographs and cut of pavilion . . . 45 75

Painter & Co., electrotypes . . . . . 1 25

Sterrett, B. F., season checks, etc . . . . . 113 75

Thomas, P. J., blank books, etc . . . . . 10 50

Thomas, P. J., 1,000 Reports 17th Exhibition.. 280 00

\$1,210 15

SALARIES—Salary of Superintendent, Secretary, janitor,  
engineer, clerks and watchmen . . . . .

\$7,086 35

STATIONERY—Bancroft, A. L. & Co., stationery . . . . . 26 58

Cunningham, Curtiss & Welch, rubber bands, etc 7 50

Langley, H. G., Directory . . . . . 5 00

Secretary, petty expenses . . . . . 35 00

Wilson, H., stamps and envelopes . . . . . 73 95

\$148 03

WATER—Spring Valley Water Works, water five and five-  
sixths weeks . . . . .

\$583 35

\$21,669 10

## RECAPITULATION OF EXPENSES.

Advertising .....	\$1,216 20	
Art Department .....	296 90	
Decorations .....	118 05	
Expense.....	2,050 27	
Horticultural Department. ....	84 00	
Lighting.....	1,606 45	
Machinery.. . . .	616 55	
Music .....	2,756 00	
Premiums.....	3,896 80	
Printing.....	1,210 15	
Salaries .....	7,086 35	
Stationery . . . . .	148 03	
Water .....	583 35	
	<hr/>	\$21,669 10

## PROFIT AND LOSS.

REVENUE—Sale of tickets.....	\$54,854 56	
Sale of privileges.....	5,503 86	
Sale of Catalogues.....	123 90	
Gas and water pipe to exhibitors .....	117 50	
	<hr/>	\$60,599 82
EXPENDITURES—As above.....	\$21,669 10	
Transferred to the Mechanics' Institute .....	38,930 72	
	<hr/>	<u>\$60,599 82</u>

Respectfully submitted,

COLUMBUS WATERHOUSE,  
DAVID KERR,  
RICHARD GRAY,

FINANCE COMMITTEE.

## PRELIMINARY ANNOUNCEMENT.

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THE following preliminary announcement prepared by the Committee on Circulars was issued in May and generally distributed in the city, and throughout the State:

# Seventeenth Industrial Exhibition

OF THE  
MECHANICS' INSTITUTE.

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THE Board of Managers take pleasure in announcing that the Seventeenth Industrial Exhibition of the Mechanics' Institute of San Francisco, Cal., will be held this year, commencing Tuesday, August 15th, and closing Saturday, September 16th, in the large and beautiful Pavilion now being erected on the block recently purchased for that purpose, and bounded by Larkin, Hayes, Polk and Grove streets, which is centrally located and easily accessible by the principal lines of street cars.

The advantages of Fairs to communities, and to the welfare of a State, are now unquestioned, and nowhere do they promise more than in our State of California, where so much may be accomplished for good by the display of the products of our soil, our manufactures, and the dissemination of correct information. The eyes and hearts of thousands of our fellow-men to the eastward are longing for the west, and here at these exhibitions they naturally come or send for information as to our resources and their chance of advancement, and every one who places on exhibition specimens of his or her handiwork, does that which will tend to permanently establish beneath our genial skies an industrious, enlightened and prosperous population, increasing the demand for all articles of consumption, besides exciting emulation, extending practical knowledge, suggesting ideas to ingenious minds, stimulating talent and extending reliable information regarding our State. With these facts in view, the management most earnestly desire and hope that the inauguration of their new Exhibition Building will witness the most com-



prehensive display in our products and manufactures that has yet been seen, and respectfully solicit the products of every department of industry, works of art of every variety, specimens of ingenuity and skill, rare and valuable curiosities, implements of agriculture and mining, the beautiful handiwork of women, the products of the forge, the workshop, the quarry and the mine, the field, the hot-house, the orchard, the vineyard, the garden—in short, whatever nature or art can contribute, curiosity discover, or ingenuity devise.

The co-operation of all classes is requested to make this exhibition worthy of this State and the age we live in.

The plan of the New Pavilion is a rectangle,  $412\frac{1}{2}$  feet long by 220 feet wide, with Central Nave the entire length of the building, spanned by 21 arches, 87 feet from floor to apex, with a wing on either side two stories in height and 50 feet wide.

A spacious promenade gallery on the second floor will be accessible by easy stairs and a powerful elevator, and the whole building will be arranged in the best possible manner to display the articles received. An Art Gallery 300 feet long, with the most improved system of lighting by day or night; an Exotic Garden 300 feet long, covered with glass, and perfectly ventilated; a Machinery Hall 80x200 feet, with a solid foundation, powerful engine, two lines of shafting, well supplied with pulleys of various diameters, are a part of the conveniences now being prepared for exhibitors. In addition to gas, the electric light will be used to illuminate every part of the building at night.

Power, steam and water, in reasonable quantity, will be furnished free.

There will be no charge for space.

An Orchestra of the best Musicians on this Coast will perform each afternoon and evening.

After careful consideration, the Managers have decided to award premiums this year, consisting of Medals and Diplomas, of new artistic design and workmanship, and to that end are now preparing a careful and classified List of Awards or Premium List, which will be published and distributed at an early date, which, with a copy of the rules and regulations, or any further information, can be had or will be sent, on application to the Secretary, 27 Post street.

# RULES AND REGULATIONS OF THE SEVENTEENTH INDUSTRIAL EXHIBITION.

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## RULE I.

THE Pavilion will be opened for the reception of goods from and after Tuesday, August 1st.

The exhibition will open to the public on Tuesday, August 15th, and will continue open from day to day (Sundays excepted), from 10 A. M. to 5 P. M., and 7½ to 10 P. M., except Saturdays, when the exhibition will open at 10 A. M. and 7 P. M., and close at 11 P. M., until September 16th.

## RULE II.

Articles can be entered for exhibition or competition, as desired.

If entered for competition the articles must be in position and receipted for, and the entry tag attached, not later than Friday, August 18th.

Articles intended by the exhibitor for competition, but not entered and in position by the time specified, to-wit: August 18th, shall not, under any circumstances, be allowed to compete, except when the written consent of all the contesting exhibitors for that premium shall have been filed in the office.

## RULE III.

The driving engine will be in operation three days previous to the opening, and exhibitors of Machinery in motion will be required to have their machines in running order on the opening day.

## RULE IV.

No charge of any kind will be made to exhibitors for space. Steam and water will be furnished free, in reasonable quantities.

## RULE V.

Applications for space can be made at any time, and should be made as early as possible, and at least two weeks previous to the opening of the exhibition.

Blank forms of the applications for space will be furnished by the Secretary.

Space will be awarded as early as practicable (after the application has been received), consistent with the proper arrangement of the goods.

Space allotted to applicants and not taken possession of by the arrival of their goods, or otherwise, on or before Friday, August 12th, may be assigned to other exhibitors.

The Board reserves the right to exclude from the exhibition all things they deem objectionable, as nostrums, articles of an explosive, inflammable, dangerous, or offensive character.

## RULE VI.

Exhibitors will receive from the entry clerk, on the arrival of their goods, a receipt for the same, which must be presented for their delivery at the close of the exhibition. Articles entered for exhibition or competition must be so designated in the receipt.

## RULE VII.

There shall be three or more jurors in each class.

They will be men wholly disinterested, and possessed of knowledge and experience in the class of articles assigned them.

Articles entered only for exhibition shall be so reported by the jurors, and so appear in the Report of the Exhibition.

Jurors may refuse to award any premium when articles competing are not meritorious.

In every case where the jurors have reached a decision, they shall file with the Secretary a report giving the name of the exhibitors, the articles examined, and the number of the class in which it is entered.



In cases where it is not practicable for jurors to test or examine machines in the building, or where models only are exhibited, they may go outside the buildings to make such examination or test, but the jurors must first procure from the Board of Managers a written consent, which must be attached to their award when filed with the Secretary.

Should any juror, for any reason, before entering upon the examination, or while in progress, become incapacitated from serving, the Board shall select another juror.

All awards and recommendations of jurors must be submitted to the Board of Managers, on or before September 2d, and receive their approval before being published.

#### RULE VIII.

The announcement of awards will be made by the Board of Managers, on Saturday, September 9th.

#### RULE IX.

Power will be furnished for driving machinery from the main line of the shafting, which is 2 15-16 inches in diameter, and will make about 110 revolutions per minute. Driving pulleys, 30 inches in diameter, will be furnished free to exhibitors. Pulleys for the main line, if furnished by exhibitors, must be accurately balanced, and have the owner's name plainly marked thereon, and should be received and placed in position by Friday, August 11th, as, up to that time, it can be done without unnecessary labor and inconvenience.

#### RULE X.

No article on exhibition can be removed until the close; but reasonable facilities for making sales of articles, for delivery at the close of the exhibition, will be afforded.

#### RULE XI.

The most effectual means will be taken, through the agency of the police and otherwise, to guard and protect the property on exhibition; and it will be the purpose of the Managers to return all articles to the owners without loss or injury. Still, all articles deposited will be at the RISK OF THE OWNERS.



## RULE XII.

In order to preserve the general harmony of the exhibition, and make the display of goods attractive, the Board reserves the right to direct the general arrangement of the articles on exhibition, and to regulate the dimensions of all signs and advertisements.

## RULE XIII.

Employee's tickets found to be unnecessary for the purpose for which they were issued will be forfeited.

Every season ticket will be forfeited, if presented by any other person than the party to whom it was issued.

## RULE XIV.

All boxes and packages containing articles for the exhibition should be marked "Seventeenth Industrial Exhibition," San Francisco, with the name and address of the sender. If the freight thereon is paid, it will be taken charge of by the Board, and removed to the Exhibition building. Cartage at the expense of the exhibitor. A detailed statement of the contents of each box or package should be inclosed with the same, or sent separately by mail or express.

The Board of Managers do not consider the premium list herewith appended as complete, nor are articles entitled to premiums limited to the ones here enumerated, but any meritorious article on exhibition not herein mentioned will receive due consideration from the jurors.

# THE OPENING EXERCISES.

AT THE NEW PAVILION, TUESDAY, AUGUST 15TH.

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It was deemed by the management more fitting and appropriate for the occasion to have the exercises held in the Pavilion than elsewhere, as heretofore, they being in part dedicatory to the new building, as well as inaugurating the Exhibition. To that end the larger room of the Art Gallery was specially prepared by erecting a temporary stage for the Chaplain, Orator and invited guests, and arranging two thousand seats for spectators. The supervision of all matters pertaining to the exercises and general arrangement was in charge of the Committee on Literary Exercises, Messrs. Kerr, Bassett and Spaulding. At 2 o'clock, P. M., the space allowed was filled to the utmost by an appreciative audience, who listened attentively to the end of the following programme:

1. Grand Opening, *Overture March*,..... By the Band  
(Dedicated to the Board of Managers by CHAS. SCHULTZ.)
2. Prayer,..... By Rev. F. L. Nash
3. Introductory Remarks, . . . . . By President P. B. Cornwall
4. Grand Overture,..... By the Band
5. Recitation, *Song of the Steam (Geo. W. Cutter)*..Miss J. Humphrey Smith
6. Fantasie, *For Saxophone Solo*, ..... By L. Mundwyler
7. Oration,..... ..Hon. Chancellor Hartson
8. Pretisssimo Galop,..... .. By the Band

Owing to severe illness, the President was obliged to forego the usual inaugural address, being barely able to make a few remarks of welcome and introduce the Chaplain, Reader and Orator.

## ORATION BY HON. C. HARTSON.

### OUR PROGRESS.

"Great mechanics have done more in the last fifty or sixty years than great politicians, great statesmen or great generals to affect permanently the fortune of nations."—*Starr King*, 1861.

"We only know that the last half century has witnessed an amazingly accelerated progress in useful discoveries, and that at the present moment Science and Art are acting together with a new companionship, and with the most happy and striking results."—*Daniel Webster*, 1828.

### SCIENCE AND THE MECHANIC ARTS.

The relations between science and the mechanic arts may be compared to the relations between the mind and the body, between steam and the steam engine, or between electricity and the electrical apparatus—both being indispensable for the accomplishment of any useful purpose.

Science and the mechanic arts are so intimately connected and so mutually dependent that they will be treated as identical in purpose and results, and as mutually contributing to the world's developement and progress from the earliest ages of recorded time down to the present period.

### PRE-ADAMITE EXISTENCE.

#### THE SPECULATIVE PERIOD.

“The earth was without form and void.”

That the earth existed untold ages before the creation of man, and that man was the last in the ascending order of successive beings created on the face of this planet, is a deduction of geological science established by evidence so complete and undeniable as to leave no doubt of its reality. The exact form of its existence is, during some of its periods and to some extent, a matter of conjecture.

Some, with much plausibility, maintain the theory that originally the elements of the earth were in a moist, attenuated state, like a cloud, and that gradually under the influence of gravitation, of cohesive force, and of chemical affinity, they assumed the form of a globe; and that at a subsequent period it was in a liquid or molten state, subject to intense heat, and that it has been slowly cooling ever since. When in this condition, all of the waters now forming its rivers, lakes and oceans must have been resolved into steam, encircling the earth, as the atmosphere now does, with one vast cloud of heated vapor, and the time finally arrived in the cooling process when a crust was formed over the molten sphere like ice on water, and that in the course of time the earth's heaving surface acquired greater thickness and solidity, and the surrounding vapor was gradually condensed, forming ponds, rivers and oceans.

Probably during this period of intense chemical action and elemental strife, the wild hurricanes swept through the burning air and seething ocean, the electric shocks rent the clouds and cleft the yielding earth, the burning and belching volcanoes and heaving earthquakes forced from the fiery gulf below the nether substratum to form islands or future continents, with mountain peaks piercing the very skies. The boiling ocean and steamy atmosphere must have caused torrents of rain and prodigious currents, which, like the Niagara, leaping from rocky heights to deep caverns below, disintegrating and wearing away the yet plastic rocks and depositing the debris in lower levels, perchance in the beds of lakes and seas, in successive layers, thus formed what has since become stratified rocks. This incessant action of chemical forces and internal fires, lifting the beds of lakes and oceans, making highlands and mountains, and the constant surging of billows, wearing rocks to dust and soil, prepared the earth for the production and the support of animal life.

#### THE DEMONSTRATIONS OF GEOLOGY.

During these changes in the condition of the globe, and in witness thereof, vegetable and animal bodies began to appear, first in the sea and afterwards on the land, and continued their appointed periods, perished, and were suc-



ceeded by other higher orders of organized life. Thus, during ages, and cycles of ages, the earth was occupied by successive kinds of animals and plants, some of proportions most minute and others vaster in bulk than any now in existence.

The busy, delving hand of enterprise, earthquakes and volcanic forces have cleft the great body of nature and exposed the contents of the lower strata of rocks, formed at incalculable periods of time before the fiat of man's creation was pronounced by the Great Artificer of the Universe, showing that first in production of organized life, far back in the youth of time, came the reef-building corals, the trilobites swimming on their backs, the brilliantly-colored cronoids, the stone-flower, the nautilus, and the cuttlefish, whose remains are found imbedded in the Cambrian strata of rocks, the thickness of which is about five thousand feet. Passing the Silurian strata of about seven thousand feet in thickness—during the formation of which hundreds of animal species filled their appointed time and became extinct—we reach the old red sandstone where appear sharks, rays and a variety of fish. Afterwards, in their order, appear rank and gorgeous vegetable productions, and immense forests, trees of great size and beauty, including the graceful araucaria, from which probably originated the immense beds of coal and deposits of coal oil, afterwards appear reptiles, crocodiles, lizards and frogs of great bulk, insects; quadrupeds—the hyena, bear and tiger—of terrible power and enormous size; also the huge mastodon and the megatherium, a beast of stupendous proportions, and finally, in the long ascending series of generation and as the finishing stroke and culmination of creative power and intelligence, man with his two-fold nature of mind and matter, each part wonderful in the wisdom of construction, and more wonderful in their mysterious union, created by the same Omnipotent Power “that stretched out the north over empty space and hung the earth on nothing;” the same Jehovah that poises the stars in the firmament, that created our solar system and the stellar universe, that adjusts and controls the complexities of nature's interbalanced terrestrial and celestial forces, and that established and maintains equilibrium and harmony throughout the domain of the entire universe.

#### OUR INEXPERIENCED AND UNTAUGHT PROGENITOR.

In the beginning, the universe in all its vastness and in all its minuteness, with the near and seen and the remote and unseen, was spread out on every hand, and all was new, untried and unknown.

There was much to learn in the sciences of Astronomy, Geology, Physiology, Mechanics and Chemistry, and in all the departments of nature, as well as through the practical lessons taught by observation and experience in real life.

Whether the rain, the clouds, the beautiful rainbow, the changing seasons, the gorgeous array of scintillating and glowing celestial lights, were the results of fortuitous combinations of chance, like the colors of a kaleidoscope, or the works of an intelligent power, indicating order, design and adaptation, was an unsolved problem to the untutored mind of the progenitor of our race.

He had not had any opportunity to learn by experiment, by precept or books, that all of the atoms and bodies of matter wherever located in the



the realms of nature are governed by uniform laws, undeviating order and exact proportions.

The silence and darkness of ancient night brooded over the past. Nothing was then known of the scenes, periods and events of time.

The great progenitor of our race, standing on the line dividing the unknown past from the uncertain and conjectural future, could know little, absolutely nothing, of the elemental strife of the chaotic period, which recent geological researches and discoveries have established with evidence so clear and so conclusive as to amount to demonstration; neither could he, with all of the knowledge then vouchsafed, prognosticate future events, or foretell the changes that time has wrought in the world's history.

#### PROGRESS OF SCIENCE AND ART.

From the primeval condition of ignorance and dependence, the growth of science and mechanic arts has been slow and beset with difficulties.

Often, erroneous theories and systems have been adopted and incorrect courses have been pursued, and there has been a great struggle through all ages in advancing from the unknown to the established, and from conjecture to demonstration. During the early pupilage of the human race many wild and extravagant opinions were entertained and erroneous practices prevailed. The ancients believed that there were four elements—fire, water, air and earth--and for thousands of years the properties and changes of all bodies were explained on this hypothesis. The doctrine of the transmutation of substances was fully adopted and firmly believed.

#### ALCHEMY

Preceded Chemistry and formed one page in the world's history. It was associated with Magic, Astrology and various other gross impositions. The elixir of life, the universal solvent, the secret of transmuting baser metals to gold, and the philosopher's stone were the chief objects of search by the Alchemist. Such discoveries were regarded as possible, and it was confidently expected that they would bring in their train boundless wealth, perpetual health, eternal youth and unalloyed happiness.

Experiments, inventions and discoveries in the accomplishment of these illusory objects laid the foundations of modern Chemistry, with all of its contributions to the wealth, health and happiness of mankind.

#### THE SCIENCE OF CHEMISTRY

Teaches us that all of the changes that take place in bodies when their parts attract or repel, unite or separate, are governed by fixed and unalterable laws, and that although substances may be so united as to change their form, color, density and properties, still nothing is lost. The simple elements may be absolved into compound, the compound may be resolved into simple elements, or unite with other elements and form new bodies; still it is done with absolute precision and regularity, and amid all mutations, the quantity of matter, whether in a liquid, gaseous or solid state, whether combined with the air, ocean or land, remains unchanged and unchangeable.

Rocks, crystals, water, air and all bodies are formed by the union of the elementary particles according to laws the most undeviating, and in proportions mathematically exact.

#### ELEMENTARY SUBSTANCES.

The entire number of ultimate undecomposable constituents of bodies or matter is estimated by some scientists to be sixty-four.

Although the entire number of elements is so great, yet few--oxygen, hydrogen, nitrogen and carbon, composing the atmosphere, and known as the atmospheric group--are the principal factors in this world's economy. They are the chief constituents of the animal and vegetable world.

And, as from the simple alphabet of letters all words, books and libraries--the storehouses of fact, fiction and song of the world's history and knowledge--are formed, so out of a few elementary substances, by various combinations are formed the lily, the tree, the rock, the land, the air, the ocean, and all bodies on earth; and, so far as we know, throughout universal nature.

#### TELESCOPIC AND MICROSCOPIC VISION.

Science, exhibiting creation in her most majestic, sublime and magnificent aspects by the aid of telescopic vision, and in her lowliest, most subtle, and most minute parts by the aid of microscopic power, has greatly enlarged the boundaries of knowledge, the field of rational enjoyment, and achieved her proudest laurels.

By the aid of optical instruments--microscopic lenses--the blossom that hangs suspended upon a tree has been discovered to have other and higher uses and purposes than to shelter the tender fruit it enfolds.

"Now that blossom is seen to be the base of a vast and complicated system, and carries on its surface, and on every fibre of its surface, the ample habitation of many a living creature. Not that blossom only, but every leaf of the forest, every flower of the field, every spear of grass in the valley and on the mountain top, breathes beneath the microscopic lens with animation and teems with life. Other, and still other, and yet other compartments are unfolded, and new races of beings pass before the eye as glasses of greater, and still greater and greater magnifying powers are interposed. Indeed, the farther this downward track to nothingness is traveled, the farther seems to stretch the still untraveled residue.

"No glass has yet been found of power sufficient to reach quite down to non-existence. Not even the nether limit of creation has been fixed. That line is undrawn that marks creation's minimum--Jehovah's *ne plus ultra*."

From the minute creation, too minute for comprehension, filling the mind with amazement at its myriad infinitesimal organisms, too profound for man to compass, let us turn and consider the wondrous and sublime telescopic revelations embracing our solar system: the sun, with its brilliant retinue of planets, moons and asteroids; and the infinity of fixed stars beyond, of enormous magnitude and of indescribable distances in the vast solitudes of immensity.



Previous to the invention of the telescope, in 1608, about five thousand was the greatest number of stars that could be seen under the most favorable conditions of atmospheric purity. The telescope reveals to mankind from thirty to fifty millions of these beautiful orbs, scattered along the vast spaces of the universe.

The sun, whose volume is more than a million times greater than that of our earth, has, at various distances, revolving about her, in perfect order and with great celerity, nine primary planets with their attendant and ministering satellites or moons.

Mercury, the nearest planet, is forty millions of miles from its flaming centre. Uranus plows the ether seventeen hundred and seventy millions of miles from the common centre; while far outside, in regal state, rides Neptune, with its satellites, moving in indescribable splendor and velocity, twenty-eight hundred and fifty millions of miles from our common sun.

The constant balancing of gravitation and centrifugal forces maintains the movements and preserves the order of this beautiful and sublime system of sun, planets and satellites, each kept in its own orbit and moved on forever in grandeur by Omnipotent Power.

But far more magnificent and marvelous is the stellar universe; with its infinity of fixed stars, more distant, more luminous and grander than our chief orb of day.

Herschel estimated the boundaries of the stellar universe to extend so far in the direction of the Milky Way, that light, traveling with its unsurpassed celerity, would occupy seven thousand years in passing through the space intervening between the earth and the utmost limits discovered by the telescope.

Astronomers assign to the sun an obscure and unimportant place in comparison with the innumerable fixed stars blazing in the firmament.

Said a late author: "There are myriads of stars in space immeasurably greater than it. With all of its retinue of ponderous orbs, it is only one of innumerable hosts of such suns and systems. The stars look very diminutive in comparison with it, but they are hundreds of thousands of times further off. A ball shot from a cannon, and moving at the rate of five hundred miles an hour, could not reach the nearest of these in less than thirteen millions of years. Light is the rapidest of known travellers. A ray from the sun reaches us in about eight and a quarter minutes; but there are some stars in the heavens known to be so remote that if a ray of light had started from them direct for our world when Adam drew his first breath it would hardly yet have reached the earth. Sirius alone gives out nearly four hundred times as much light as the sun, and yet Sirius is a star of moderate size among stars. It takes the earth one year to complete its revolution around the sun, but it takes the sun eighteen millions of years to make its revolution around the center which it obeys."

The magnitudes are too great, the distances stretch out too far on the line of infinity, the heights are too lofty, and the depths too profound, for men to measure or penetrate. We are amazed and overpowered in the contemplation of the vast and complicated system of whirling orbs in the universe.

Within the last three hundred years, by the aid of the telescope, the riches of the astral empire have been revealed and distant lines have been sighted. By the aid of other instruments the boundaries of discovery may be pushed far out on the verge of immensity.

The invention and use of the microscope and telescope illustrate the relations between science and art, and show that they are mutually dependent, and walk hand in hand in the paths of useful discovery.

#### PUBLIC OPINION AND GOVERNMENT.

Public opinion and the principles of government have kept pace with the advancing lights of science and art, and have become more liberal, more tolerant, and more humane.

As ships on the sea are often, for a time, retarded or driven back by adverse currents and contrary winds and waves, so governments are often assailed by interest, passion and ignorance, and the regularity of their movements disturbed and their progress arrested.

The discoveries, advanced state and changed opinion of any age often make the practices and opinions of the preceding seem absurd, preposterous and sometimes cruel.

The criticisms that we make upon the practices of former generations peradventure may be applied by our successors with equal force to opinions and practices of our own age.

We review the history of our own immediate ancestry with mingled feelings of humiliation and grief, exultation and gratitude.

British history reveals the mortifying fact that our own forefathers were a few centuries ago occupants of huts and caves, clothed with skins of wild beasts, and were worshipers of idols.

#### HERESY AND SORCERY.

Within the last three centuries nearly all Europe has been converted into a field of carnage and slaughter in punishment of misjudged heresy and sorcery. Heresy was adjudged a crime against Church and State, and punished with death by fagot, fire and the stake, and by the cruel inquisition. It is only during the present century that the inquisition has ceased to do its bloody work to suppress freedom of thought and liberty of conscience. History contains the sad statement, that in the district of Jura, in France, one judge sentenced to death six hundred persons on charges of witchcraft and sorcery in the years 1598-9 and 1600. It is less than one hundred years since the Bastille—the fearful and horrible place for the punishment of political offences—was demolished by a suffering and enraged people.

#### THE CIVIL WAR OF AMERICA.

We cannot forget, even if we would, that in our own times and in our own country we have had a most gigantic and terrific contest for emancipation and liberty—a contest of such intensity and magnitude that we still feel the chill of blood, the paralysis of nerve and blindness of sight arising from the lightnings and thunders of battle, on the issue of which was suspended the destiny of three millions in servitude, and the perpetuation of a system of bondage that flourished during the reign of the Pharaohs, that has been transmitted through



the Grecian, Roman and Anglo-Saxon civilizations and politics down to our time, people and country, which became the renowned theatre of contention between citizens of an illustrious and heroic nation; where the "irrepressible conflict" raged with a violence indicative of the robust constitutions, strong natures and vehement passions of the contestants; and where the adverse and counter currents of interest and ambition, judgment and conscience were so strong and violent as to produce a moral and political cyclone more destructive and more terrible than any yet displayed by the atmospheric forces in the physical world. We are amazed and filled with mortification and grief that there should be such a contest for humanity and constitutional liberty in our age and country.

#### CONTRAST AND PROGRESS.

But when we remember that the hut has been superceded by works of architecture of the greatest skill, by houses and temples of the highest beauty and the most exquisite workmanship; the skins of wild beasts by cloths of the finest texture; idolatry by the pure and exalted worship of the eternal God; superstition, intolerance and persecution by the voice of reason, philosophy and toleration; when we remember that in the great contest for human rights the angel of mercy triumphed; that a republican form of government was established; that the seeds of permanent friendship, order and tranquility were planted everywhere; and that universal accord is now assured in the sentiment, "Liberty and Union, one and inseparable, now and forever;" when we remember all of these cheering results and witness the advancing steps of freedom, humanity, justice and charity, we rejoice with great joy.

At no previous period in the world's history could such a fierce contest and the storms of mad war produce such benign and auspicious results.

It was the last great battle between ancient and modern civilization, and its decision has done more to settle the principles of society and government on a permanent basis, and establish equality and harmony among all classes, than any previous act of history.

#### PROGRESSIVE STEPS IN DISCOVERIES.

The great and important discoveries and inventions are not the work of a single day, nor of one individual alone, but are the products of time and of progressive development. Each generation is indebted, to a large extent, to its predecessor for the facts and principles which ultimate in useful and brilliant discoveries.

The great discoverers and inventors in one age have built upon the foundations laid by others, and have crowned their work.

#### NEWTON.

Newton, "whose discoveries pour in day upon the works of God as if a second fiat for light had gone forth out of his own mouth," founded the theory of universal gravitation upon principles before established by Kepler; yet much of Kepler's knowledge was derived from the study of the Copernican and Ptolemaic systems.

#### HERSCHEL.

Herschel is entitled to great honor for the invention of his telescope of wondrous magnifying power; yet, without derogating from his just fame, his-

tory traces the discovery of the telescope, though in an imperfect condition, to Galileo, and from him traces the principles of its construction still further back to three almost unknown competitors for the distinguished honor of original discovery, to Metius, Jansen and Lippersheim.

#### COLUMBUS.

The discovery of America is due to the enterprise, skill, patience and implicit faith, and even to the temerity of Christopher Columbus. And he is entitled to that honor without abatement or diminution. Yet Paulo Loscanelli, a learned cosmographer of Florence, prepared the map which guided Columbus in his first voyage of discovery. The Northmen visited the northeast coast of America in the tenth century and planted a colony in Greenland, with which they afterwards maintained intercourse.

#### ROBERT FULTON.

All honor to Robert Fulton, whose steamboat was pronounced a failure in 1803, and in 1807 a success, because its speed was then five miles an hour on the glassy Hudson. Yet James Watt had brought the steam engine to a high state of perfection in England as early as 1775. The power of steam had been known for centuries, and unsuccessful experiments had been made to harness it to machinery, both on land and on water, in regions most remote; but its useful application to lighten labor and facilitate business is of recent date.

The great stars of invention and discovery stand out before the world in grand and striking proportions, like the Mississippi and Amazon rivers; but we know as little of the aids, incentives and inspirations that contributed to their success as we do of the springs, rills and streamlets, that are tributary to those great rivers.

#### THE PRESENT CENTURY

Has been most fruitful in useful inventions, improvements and discoveries, and the production of mechanical industries is fabulous.

#### THE STEAMBOAT.

There are those living that saw the first steamer that skipped over the laughing Hudson, now renowned for its floating palaces. In 1819, the first transatlantic steam line was established between Savannah, Georgia, and England. This line had one small steamer named "Savannah" that made its first trip from Savannah in 1819. Now all of the wharves of our great cities are lined, and all of our bays, lakes, rivers and oceans are dotted with steam crafts bearing the commodities and commerce of all zones.

#### THE LOCOMOTIVE.

Steam wagons preceded the railway locomotive. In 1770, Cugnot, a Frenchman, constructed a steam wagon for use on common roads. Robert Watt, of England, patented a road engine in 1784. In 1787, Oliver Evans obtained from Maryland the exclusive right to propel wagons by steam in that State.

The first high pressure locomotive was built in England in 1802, and the second in 1804. George Stevenson, of England, in 1814, constructed the first locomotive that attained a speed of six miles per hour.



The first section of the great commercial highway now known as the Baltimore and Ohio Railroad, was begun July 4, 1828, and was at first operated by horses.

The first locomotive constructed in the United States was built by the well-known Peter Cooper, in Baltimore, in 1830. Two years previously there had been a shipment of a limited number of locomotives from England. When we survey the map of the United States, with its network of railroads stocked with cars and engines and bearing the inhabitants and commodities of all climes onward swiftly to their destination, and consider that all of these mechanical energies are the production of the last half century, we are not only amazed, but distrust both our eyes and history.

#### THE TELEGRAPH

Has become one of the most useful and important factors in business. The almost instantaneous transmission of intelligence from continent to continent and from pole to pole has contributed greatly to equalize, harmonize and civilize mankind.

In 1844, Professor Morse constructed the first telegraph line in the United States between Baltimore and Washington. Cyrus W. Field connected America with Europe by a submarine telegraph laid across the Atlantic, August 5, 1858. Since, two hundred cables have been laid, with a length of fifty thousand miles.

In less than forty years telegraph lines have been extended with their myriad arms streaming with lightning all over the habitable globe, and made continents vocal with their magical power.

#### THE TELEPHONE

Is an instrument of recent invention. Professor Reuss, of Germany, has the honor of first discovering this new agency in the year 1865. Afterwards, Professor Gray devised the harmonic telephone. The speaking telephone was subsequently produced by Mr. Bell of Massachusetts. Mr. Edison has devised a telephone that transmits vocal sounds over long distances with great distinctness. This system of transmitting sound is now in its infancy, and no one may anticipate the rich results of full developement.

#### THE ELECTRIC LIGHT

Is a new agency for illumination of so much power and brilliancy as to emulate the sun in the intensity of its brightness. Faraday, an English scientist, discovered this method of illumination in 1832. The announcement of this discovery at once attracted others to this new field of enterprise. As old miners seek the spot in haste where new and rich lodes are reported, and eagerly prospect for greater developments, so electricians and scientists sought for both fame and fortune in this new and glittering field of attraction.

In this new field of experiment the efforts of the youthful Brush, of Cleveland, have been attended with remarkable success. With this method and apparatus he is providing this city with an agreeable steady light, so intense as to convert the darkness of night into the light of day, and at rates so moderate as to defy competition.

Electricity appears to be the great reserved force of nature to supply mankind with light, heat and power, when nature's other sources of supply are exhausted, and thus to continue the present system in the world's economy.

#### THE CABLE ROAD

For its convenience, for its celerity of transit, for its cheapness, and for its utter disregard of elevation, deserves special mention.

The beautiful cable-car as it faces the upward grades and steeps, without horses and without any apparent propelling power, begins its course with a gentle movement and then glides majestically up the acclivity, like a phantom, and as if instinct with life.

The result of this achievement is to make accessible otherwise inaccessible parts; to justify the construction of houses and homes and palaces on the highest and loftiest points; to give value to property otherwise valueless, and to add largely to the wealth of individuals, cities and States.

This car, with its grip, slot, brake and revolving cable, was first used on Clay-street hill, in the city of San Francisco, in the year 1873. It is now adopted on five prominent roads in this city, and the fame of its unprecedented success is spreading to distant cities.

The merit of this invention is enhanced here by the consideration that its author is a gentleman well-known and of long residence in this city, and a worthy member of this Institute, and for many years its honored head, A. S. Hallidie, Esq., who has made other discoveries and inventions which give him high rank among inventors and among those who have done signal service to the community and our race.

#### THE FUTURE.

We have no criterion or rule by which to measure or calculate the possibilities of the future. It is certain that the elements, powers and forces of nature are not fully, nay, only partially revealed. There may be some powers like electricity (whose discovery and application to material uses are recent,) now lying dormant and unknown, the discovery of which hereafter may revolutionize the business and change the current of human affairs.

Every new principle developed, every invention and improvement in art, all advancement in science and philosophy, form the basis, the capital for other and greater and grander achievements and triumphs.

The men of this age are fortunate indeed in holding this advanced position; fortunate indeed in the possession of the vast patrimony of others' experience, knowledge and wealth; in the possession of all of the inventions, and of all of the discoveries, and all of the achievements in labor, learning and thought of all preceding ages.

#### THE WORKING CAPITAL

Of this age is not limited to gold, silver, stocks, houses, land, books and machinery, nor to any material work of convenience, necessity or luxury, though valued at countless billions; but it includes all systems of ethics, religion, government and philosophy, all generous and patriotic sentiments, all philanthropic and charitable endeavors, all of the strength and sweetness



of friendship and affection, all love of right and justice, all veneration for parents and adoration for God, and all of the skill, talent, high purpose and knowledge, ambition and genius of the human race.

#### THE ZEAL AND WORKS OF THE MEMBERS OF THE MECHANICS' INSTITUTE.

It is most gratifying to know that the members of this Institute have contributed their share to this working capital, and that they have coöperated with the earnest workers, the wise and illustrious, in the progressive movements of the age.

They have constructed this palatial temple, so spacious, fitting and fascinating; so well adapted to the purpose for which it was designed; so honorable to those who originated and erected it and dedicated it to the arts and sciences, and it is now replete with models of taste, skill, thought and genius.

#### THE LIBRARY.

They have with great care and judgment selected and purchased more than thirty thousand books for public instruction, entertainment, culture and refinement.

“All that mankind has done, thought, gained or been, is lying, as in magic preservation, in the pages of these books.”

“Golden volumes, richest treasures,  
Object of delicious pleasures,  
You, my eyes rejoicing, please,  
You my hands in rapture seize.  
Brilliant wits and musing sages,  
Lights, who beamed through many ages,  
Left, to your conscious leaves, their story  
And dared to trust with you their glory.”

All are invited to come and drink deep from these fountains of knowledge.

All should patronize this Library for their own pleasure and improvement, and in recognition of the eminent services of its founders—

“Come, take choice of all my library,  
And so beguile thy sorrow.”

The managers of this Institute have, with great and unrequited labor, bought this costly and valuable block and constructed this enchanting pavilion for the glory and advancement of this metropolis, and to promote the highest interests of all the people of this coast. How difficult, if not impossible, to estimate the advantages and benefits derived from this enterprise!

In this hall are collected rare, beautiful and useful models of painting, sculpture and mechanism, attracting and exciting the curious, stimulating the ingenious and enterprising, and diffusing useful knowledge to all.

The glittering display of associated mental and material wealth in machinery, in speaking statues, in resplendent paintings laughing with life, in combination with the exhibition of light, steam, electricity, sound and motion, make this an attractive spot for students of taste and genius.

The youth will annually come here to witness the marvelous displays of mechanical ingenuity and of the fine arts; manhood for instruction; and decrepit old age to take note of the changes, the new fields explored, the work

accomplished, and to rejoice in the ever-accumulating evidences, here exhibited, of the ingenuity, wisdom and creative power of man.

Beneath the light of this institution, and under the stimulus of its influence new modes of the use and application of Nature's powers have been discovered that have contributed largely to the wealth, power and renown of the Queen City of the Pacific.

Through the benignant influence of this institution, some of the hidden forces of Nature have been revealed and brought into useful activity.

The great poet-philosopher, Pope, thus described Nature when delivered by the Maker to man:

“ All nature is but art, unknown to thee:  
All chance, direction, which thou canst not see;  
All discord, harmony, not understood;  
All partial evil, universal good.”

As the Parthenon, built under the highest inspiration of the Grecian art, by its great master, Phidias, added largely to the lustre and renown of Athens, and as the Colosseum contributed largely to make Rome illustrious for nearly twenty centuries after the last vestige of her government

“ Had gone glimmering through the dream of things that were,”

So the Mechanics' Institute, now in the first period of its existence and usefulness, will contribute to the just fame of San Francisco through coming ages down to the last syllable of recorded time.

This institution is truly one of the great auxiliaries of mechanical power. It is both the duty and interest of the intelligent and enterprising, and of all classes of this city and State, to give this institution a generous support.

Each year, in this Pavilion, are presented new facts, ideas and inventions, from which other ideas and inventions will be evolved, forming links in the great chain of progressive development, beginning with the first ages and extending onward to the close of time.

Through the arduous labors of the founders and supporters of this royal institution, this most magnificent display of chemical agencies, of mechanical energies, of agricultural products and manufactured fabrics, is spread out before our enchanted vision in endless and magnificent profusion.

The scene before us represents the diversity of our interests; the richness and bounty of our teeming productions, the vastness of our population, the culture and refinement of our people, and the magnitude, grandeur and capacity of our city, State, and country.

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At seven o'clock in the evening the doors of the Pavilion were thrown open to the public, and, as will be seen by the financial result, was well patronized, and one of the most successful Fairs yet held in this city.

# ALPHABETICAL LIST

OF

## EXHIBITORS AND ARTICLES EXHIBITED.

[ *Except those in the Art Gallery, for which see Catalogue following this.* ]

### A

Class.

- |                             |   |
|-----------------------------|---|
| 22 Ackerman Bros.....       | Bent Wood Furniture   |
| 21 Adell, W. T.....         | Driving Cart  |
| 6 Adams & Carter.....       | Coleman's Patent Battery  |
| 21 Ahlert Bros.....         | Monocycle   |
| 19 Akstrand, Alexander..... | Display of Newell Posts   |
| 40 Allen, Mary Etta.....    | Doll Clothes, Quilt and Pillow Shams                                      |
| 18 Ambrun, Fred.....        | Model of Castle, made of Zinc   |
| 32 American Salt Co.....    | Los Angeles, Carmen Island and Liverpool Salt,<br>Crude and Manufactured. |

### B

- |                                   |   |
|-----------------------------------|---|
| 40 Baker, Mrs. C.....             | Wax and Tarltan Flowers   |
| Bailey, Miss Harriet F.....       | Paper Sculpture   |
| 29 Balny, A. J.....               | Ostrich Feathers  |
| 31 Bass, T. J. & Co.....          | Artists' Materials  |
| 11 Batchelor & Wylie... ..        | Spring Tooth Harrow and Cultivator  |
| 28 Bay City Manufacturing Co..... | Hats and Hat Material   |
| 39 Beeman, Wm.....                | Trusses and Artificial Limbs  |
| 22 Bennett, J. S.....             | Bedroom Furniture   |
| 14 Benn, J. S.....                | Artificial Flies  |
| 40 Bennet, Mrs. H. W.....         | Embroidered Fire Screen   |
| 12 Betts Spring Co.....           | Locomotive, Carriage, Car and Wagon Springs                               |
| 21 Bilz, J. A. ....               | Buggies and Jump Carts  |
| 14 Blackman, G. V.....            | Door Knobs  |
| 32 Blumenkron, Isaac.....         | Autograph letter of General Washington                                    |
| 21 Bowman, Ed.....                | Eureka Dog Carts  |
| 18 Boesch, Emile... ..            | General Display of Reflectors, Lamps, Copper and<br>Galvanized Iron work. |



## Class.

- 20 Bonelli, E. S. .... Musical Instruments and Merchandise  
 40 Bowman, Mrs. Agnes. .... Hand-made Floor Mats  
 10-24 Bodley, E. C. .... New Victor and Eldrige Sewing Machines and Bost-  
     wick Floor Sweepers.  
 6 Bowen, A. C. .... Re-Amalgamator  
 31 Boericke & Shreck. .... Homœopathic Books and Remedies  
 31 Bowen, P. M. .... Baking Powder "Ladies' Friend"  
 30 Bosqui, Ed. & Co. .... Chromo-Lithographs  
 44 Ballinger, Francis. .... Picture  
 9 Brell, Louis. .... Model of a Ship  
 40 Browne, Mrs. C. B. .... Fire Screen and Quilt  
 13 Brown, Chas. R. & Son. .... Stoves, Ranges, Granite Ware, Cooking  
     Utensils, etc.  
 21 Brunswick, The J. M. & Balke Co. .... Billiard Tables, Cushions, Balls,  
     Cues and Racks.  
 19 Brehm, R. W. .... Wood-Lathe in operation, and Turned Articles  
 11 Brush, R. G. .... Grain Cleaner  
 19 Brush, G. A. .... Oak Graining  
 25 Bryant, R. P. .... Improved Shoe Button  
 40 Bryant, Kitty S. .... Bureau Toilet Set and Crocheted Shawl  
 5 Bridwell, R. F. .... Model of Cable Road  
 20 Braendlien & Seibold. .... Zithers  
 31 Brownlie, Mrs. F. C. .... Red Clover  
 43 Brewer, George. .... Bust of Neilson  
 29 Brown, Mrs. W. C. .... Turner Corset  
 40 Bulfinch, Mrs. Ed. .... Silk and Patchwork Quilts  
 21 Buckland, G. G. .... Buggy and Improved Buckboard  
 35 Burnell, J. H. & Bro. .... Albion Ale and Porter  
 1-4-11 Bull, Geo. & Co. .... Straw-burning Engine, Portable Saw Mill, Agricul-  
     tural Machinery and Implements.  
 31 Burnett, G. G. .... Perfumery, Tonic Elixir and Toilet Articles  
 11 Butler, W. W. .... Elastic Barbed Fence  
 18-19 Burr, C. H. & G. W. .... Patent Slop-Hoppers and Weather Strips

## C

- 31 California Volcanic Water Co. .... Volcanic Water  
 12 California Iron and Steel Co. .... Pig Iron, Ore and Castings  
 18 California Brass Works. .... General display of Brass Goods, Bells, Cast-  
     ings, Plumbers' Goods, etc.  
 31 California Powder Works. .... Hercules, Sporting, Blasting and Mining  
     Powder.  
 38 California Electric Gas Lighting Co. .... System of Gas Lighting  
 19 California Glass Works. .... Glass Roofing  
 38 California Electric Light Co. .... Brush Dynamo-Electric Machine

## Class.

- 38 California Electrical Works ..Edison's Electric Machine for Generating Electric Light and Lamps.
- 11 California Gate Co.....Model of Robinson's Patent Automatic Gate
- 12-24 California Wire Works ...Iron, Steel, Copper, Tinned and Galvanized Wire; Iron Steel and Galvanized Wire Rope, round and flat; Sash Cord, Wire Cloth and Netting; Coal and Ore Screens, Summer House, Garden Seats, Arches and Ornaments, Bird Cages, Screens, Furniture, etc.
- 5 Callahan, John.....Model of Car Switch
- 21 Carville Manufacturing Co.. ....Carriages, Buggies and Phaetons
- 1-13-38 Central Gas Light Co....Gas Heating and Cooking Apparatus, Gas Engines, etc.
- 40 Cherry, May J.....Worsted Wreath
- 5 Chronicle, S. F ...Stereotype Plates, illustrating the Process of Stereotype Printing.
- 6 Chipchase, John.....Model of Oscillating Gold Washing Pan
- 10 Chope, Thomas.....Darning Machine
- 33 Ciphers, D. S.....Pop Corn
- 31 Climax Washing Powder Co.....Washing Powder
- 2 Clot & Meese .....Steam Pumps
- 22 Clark, Truman S. & Son....Wire and Hair Mattresses, Bedding, Iron Bedsteads, etc.
- 22 Clark, G. W. & Co.....General Display of Paper Hangings
- 40 Clark, Mrs. Sarah .....Embroidery Pictures
- 40 Clark, Mrs. Italy .....Quilts
- 38 Clark, I. P.....Oxford Incubator and Artificial Mother
- 31 Coleman, W. T. & Co.....Royal Baking Powder
- 8-25 Cook, H. N .....Leather Belting, Hose, Buckets, etc.
- 40 Cook, Emma J.....Wax Flowers
- 40 Cotter, Mrs. E. J.....Preserved Natural Flowers
- 31 Columbia Soap Works.....General Display of Staple and Toilet Soaps
- 28 Coppage, J. W .....Machine-made Button Holes
- 40 Cook, Mrs. A. O...Hair Jewelry and Preserved Flowers
- 44 Cohen, Herman .....Picture, "Guardian Angel "
- 19 Cousins, Henry.....Carved Portrait Frame
- 19 Corbett, Mrs. Theresa. ....Ornamental Table Top
- 31 Cryer, Chas. & Co.....Boiler Scale Compound
- 33-35 Cutting, J. T. & Co....Tolu Tonic, Milwaukee Beer, Bitters, Crushed Indian, etc.
- 9 Cumming, Capt. George.....Model of Ship made of Ivory and Silver

## D

## Class.

- 19 Dampf, Louis.....Passe-Partouts, Engravings and Frames  
 40 Dallas, Mrs. Amanda.....Wreath of Immortelles  
 33 Dawson, Wm. L.....Preserved Fruits  
 31 Davis & Cooper.....Boot Polish  
 2 Darragh, John H.....Rotary Pump  
 13 De Gurre & De Lano.....Adjustable Grate for Stoves and Ranges  
 33 De Long, F.....Apple Cider and Vinegar  
 43 Delabaire, Mme. Cl.....Modeling in Wax and Clay  
 6-37 Denniston, E. G ...Replated Ware and Silver-Plated Amalgamating  
 Plates.  
 42 Dills, Mrs. E. C.....Oil Painting  
 24-40 Dietz, Misses E. L. & M. A... Dust Pans, Crumb Receiver and Floral  
 Sign.  
 24 Dilley, J. S.....Carpet Sweeper  
 3-12 Doble, Abner....Miners' and Blacksmiths' Tools, Cast Steel Bars, Drill-  
 ing Machine, Tuyeres for Forges, etc.  
 6 Dodge, M. B.....Rock Breaker and Machine Drawings  
 27 Doyle, Henry & Co.....George A. Clark's O. N. T. Spool Cotton  
 19 Drew, John R.....Stair Work  
 4 Driver, John.....Rotary Morticing Machine and Adjustable Brace  
 5-22 Durkee & Moore....Wire-Coiling Machine for making Mattresses—  
 Wire Mattresses.  
 40 Duraind, Mrs. Julia. ....Holbein Embroidery

## E

- 40 Easton, Miss Lizzie.....Lace Work  
 40 Edgerly, Mrs. S. A.....Lace Work  
 40 Elder, Mrs. M. I.....General Display of Fine Embroidery  
 45 Elite Photographic Studio.....Photographs  
 22 Erdin, Theodore.....Kitchen Cabinets  
 29 Evertz, J. P.....List and Rag Carpet  
 47 Eveleth & Nash.....Apples

## F

- 22 Farrar, B. F....Metal Spring Bed-bottoms, Mattresses, Sofa Bed,  
 Lounges, etc.  
 6 Farwell, W. B.....Dry Concentrator  
 20 Fay Piano Manufactory.....Pianos  
 40 Favor, Miss May.....Fancy Needle Work  
 40 Federmeier, L. P.....Human Hair Pictures  
 28 Figel, Joseph.....Men and Boys' Clothing  
 24 Figer Bros.....Brushes, Dusters, Carpet-Sweepers and Brooms  
 10 Fisher, A. A....The American Sewing Machine and Specimens of Work



## Class.

44 Fletcher, Prof. H.....	Crayon and Pencil Drawing
31 Flannery, Wm.....	Centennial Cement
31 Forbes, L.....	Engineers' Hair Remedy
40 Fox, Mrs. N. R. ....	Embroidery Pictures
31 Foye Bros. (Dixon Crucible Co.,) ....	Pencils, Axle Grease, Stove Polish, etc.
29 Freud, M. & Sons.....	Display of Ladies' Corsets
40 Fraser, Mrs. Howard.....	Rug
22-29 Fredericks, Jos. & Co.....	Carpets, Window Drapery and Furniture
40 Frulghi, Mrs. T.....	Quilt
33 Franco-California Packing Co....	General Display of Canned Vegetables
40 Frits, Mrs. M. S.....	Hand-made Rugs
22 Fuller, Geo. H.....	Furniture and School Apparatus

## G

1-2-3-18 Garratt, W. T....	Hooker's Patent Steam, double and single-acting, Power and Hand Pumps; Deep Well Pumps, with Toothaker's Attachment; Anderton's Patent Blower; Garratt's Patent Jack-Head Pump; Boiler Feeders; Richmond's Patent Air Compressors and Rock Drills; Fire Hydrants; Water and Gas Gates; Hydraulic Rams; Logging Jacks; Globe Valves; Engine Governors; Boiler and Pump Combined Safety Valves; Lubricators; Bells and Gongs; General Assortment of Brass Goods, Brass Tubing, Brass and Copper Rods; Steam Guages; Tin, Copper, Antimony, Phosphor, Bronze, Bronze Casting and Bronze Statuary.
40 Gardner, Mrs. M. A.....	Silk Quilt
35 Gates, James H. ....	Pepsin Wine Bitters
3 Gabeau, P.....	Hand-made Horse Shoes
13 Gee, William.....	Patent Cups
31 Giant Powder Co.....	Giant Powder
21 Gibson, J. W.....	Model of Bicycle
22 Gilbert & Moore....	School and Office Furniture, Chairs, School Apparatus, etc.
17 Gladding, McBean & Co..	Terra Cotta Ware, Sewer Pipe, Fire-Brick, etc.
29 Goehring, Adolph.....	Artificial Flowers and their Manufacture
40 Gosliner, Miss P.....	Pillow Shams
35 Goeppert, Wm. & Son.....	Felsen Beer
44 Goddard, E. A.....	Card Writing
6 Golden State and Mining Iron Works.....	Roller Ore Feeder
40 Gonzales, Miss G.....	Hand-made Lace Handkerchief
2 Goss & Dow.....	Steam Pumps

## Class.

- 40 Great Unknown..... Fancy Table Cover  
 43 Gressli, Henry..... Sculpture and Modelling  
 43 Grundel, J. G. .... Canes and Ivory Goods  
 29 Griswold, Mrs & Co.. .... Corsets  
 8-18-21 Griswold Bros.... Lamp Filler, Oiler, Fire Escape and Pillow Sham  
 Holder.  
 19-41-44 Gump, S. & G... Mirrors, Terra Cotta Ornaments, Frames, Engrav-  
 ings, Ornaments, etc.  
 22 Guibord, D. G..... Ladies' Toilet Wardrobe  
 34 Gundlach, J. & Co..... California Wines and Brandies

## H

- 20 Hallet & Davis..... Pianos  
 20-36 Hagans, Geo. W..... Piano and Sheet Music  
 19 Hatch, James..... Machine-made Frame and Bracket  
 40 Hancock, Miss Annie E..... Silk Quilts  
 34-35 Haraszthy, Arpad & Co..... Champagne, Wines and Bitters  
 1-11 Hawley Bros. Hardware Co.... Agricultural Machinery and Implements,  
 Steam Engines, etc.  
 11-21 Hawley, David N.... Vehicles, Farming Implements, Scales, Building  
 Stone, etc.  
 33 Haas, Geo..... Candies  
 6-11 Harries, James & Co..... Gold Separator and Harrow  
 19 Hall, Lewis L..... Fret Sawing  
 22 Hartshorn & McPhun..... Window Shades and Fixtures  
 13 Harvey, C. D..... Hot Water Radiators and Furnace  
 24 Hansen, J..... Step-ladder and Elevator Combined  
 42 Hendricks, Mrs. E..... Paintings  
 40 Heath, Mrs. Emily..... Quilt  
 22 Herring, S. H..... Rustic Furniture  
 5 Henriksen, B. E..... Safety Clutch for Elevators  
 1-2-3-6 Hendy, Joshua.... Vertical Steam Engine and Boiler; Rotary Steam  
 Pump, Ore Feeder and Baker Pressure Blower  
 39 Hinkle & Handy..... Surgical Appliance  
 47 Hincley, G. W..... Apples and Peaches  
 9 Howe, J. W. E..... Model of Ship in the Arctic  
 32 Hubbard, Mrs. F. V.. .... Curios and Relics  
 40 Hubbard, Mrs. E. H..... Human Hair Goods  
 34 Hunt, W. J..... Blackberry Cordial, Wine and Brandy  
 1-6 Huntington, F. A.... Quartz Mill and Concentrator, Model of Steam  
 Boiler, Engine, etc.  
 13 Hunter, Sifter Co..... Flour Sifters  
 31 Hueter Bros. & Co..... Varnishes, Brushes and Artists' Materials  
 31 Hurtzog & Schulte..... Toothache Drops

## I

Class.

- 31 Ichi Ban.....General Display of Japanese Goods  
 22 Indianapolis Chair Manufactory Co.....Chairs and Furniture

## J

- 11 Jackson & Truman....Agricultural Machinery and Implements of California Manufacture.  
 37 Jackson, R. W.....Shell Jewelry and Inlaid Work  
 1-18 Jackson, P. H.....Device for the complete Combustion of Fuel; Improved Girder; Acme Ventilator and Vault Cover  
 38 Jackson, A .....Automatic Time Chart  
 1-3-6 Jardine, J. B .. Quartz Mill with Vacuum Attachment, Engine, Power Shears and Punches.  
 24 Jacobi & Short.....Lemon Squeezer, "Little Giant"  
 42 Jones, Wm.....Encaustic Tiles  
 40 Jones, Mrs. E. F .....Bed Spread and Pillow Shams  
 40 Johnson, Mrs. C. A.....Hand-knit Quilt  
 11 Judson Manufacturing Co. ....Mowing Machine, "The Victor"

## K

- 5 Kennedy, James P.....Windmill and Cylinder Pump  
 21 Kerr, David.....Wagons, Truck and Hose Cart  
 7-24 Keystone Wringer Company....Wringers, Carpet Sweepers, Crimping Machines, etc.  
 31 Keil, Fred C.....Perfumery  
 2 Kessler, Henry.....Steam Regulator for Pumps  
 27 Kittle & Co.....J. P. Coats' Spool Cotton  
 45 Kirkland, J. B.....Photograph of Pennsylvania Scenery  
 40 Kincaid, Mrs. S. A.....Bed Spread and Pillow Shams  
 21 Kimball, G. P.....Two-Wheeled Phaeton  
 21 Kitzmuller, M .....Buggies and Rockaway  
 21 Kirkland, Wm. P.....Horse Hitch  
 45 Klain, N. M.....Photographs  
 13 Koch, Adam .....Cooperware  
 40 Kothe, Mrs. C. M.....Preserved Flowers  
 40 Kramer, Mrs. P. E.....Fine Embroidery  
 19 Kruger, J. H.....Canes  
 2-5 Krogh, F. W.....Windmills and Pump  
 11 Kroff, S. W.....Elastic Barb Fence

## L

- 22 Laermans, Frank .....Patent Combination Furniture  
 22 Lange, Jno. C. R .....Willow and Rattan Furniture  
 45 Lange, O. V.....Photographic Scenery  
 40 Lawton, Theodore .....Grass Work





## Class.

- 39 McLean, A. A. .... I. X. L. Truss  
 21 McCue, M. J. .... Carriages, Buggies, Wagons and Rockaway  
 43 McGowan, Mrs. Judith. .... Cushions, Perfumery, Sachets, Bags, etc.  
 42 McCormick, Miss M. E. .... Painting on Satin  
 7-24 McConaughy, D. E. .... Carpet Sweepers, Wringers, etc.  
 47 McLellen, Mrs. M. C. .... Prolific Graft of Pears  
 19 McEachren & Rowe. .... Gold Frame  
 40 McPherson, Mrs. M. P. .... Fern and Rock Pictures  
 31 Merriman, A. F. & Son. .... Dental Toilet Articles  
 21 Mersereau, A. S. .... Mersereau's Improved Buggy Wagon  
 46 Meyer, E. .... Foliage, Plants, Flowers and Ferns  
 31 Merrill, J. L. ... H. W. John's Asbestos Paints, Cloth, Pipe Covering, etc.  
 29 Mish, Mrs. S. .... Millinery Goods  
 31 Mitchell, Geo. H. .... Magic Lotion  
 37 Michel, Bichara & Co. .... Oriental Curios from Jerusalem  
 34 Migliavacca, G. .... Zinfandel and Malvasia Wine  
 40 Morse, Mrs. J. .... Pillow Shams, Crewel and Silk Embroidery  
 17-32 Montague, W. W. .... Grates, Marbleized Iron, Mantels, Encaustic Tiles,  
     Fire-Place Heaters and Ornamental Articles.  
 44 Moore, Mrs. M. H. .... Crayons and Paintings  
 40 Moldrup, Miss Ade. .... Antimacassar  
 40 Morse, Mrs. H. .... Quilt  
 31 Moore, A. S. & Co. .... Silicate Paint, Oils, etc.  
 29 Morrow, Mrs. & Co. .... Griswold's Skirt-Supporting Corset  
 40 Moore, Miss H. E. L. .... Turkish Rug  
 46 Murphy, J. T. .... Cut Flowers  
 11 Mudge, T. A. .... Wheeler Patent Fruit Cannery  
 47 Munson & Greaves. .... Tuscan Wheat  
 13 Myers, Jno. F. .... Oil Stoves and Stove Furniture  
 46 Myers, E. .... Plants and Flowers

## N

- 35 Naber, Alfs & Brune. .... Whiskey and Bitters  
 21 Nathanson, M. .... Vehicle Brake and Horse Check

## O

- 40 Oakshett, Miss M. A. .... Turkish Rugs  
 29 Ober, Mrs. M. H. .... Dress Reform Garments  
 12 Occidental Foundry. .... Chilled Car Wheels, Iron Castings, etc.  
 1 Ohmen, W. H. .... Steam Engines, Upright and Horizontal, Engine and  
     Boiler Combined.  
 40 O'Neil, Celine. .... String of Buttons  
 11 Osborne, D. M. & Co. .... General Display of Agricultural Machinery  
     and Implements.

Class.

- 4-21 Osborne and Alexander... Foot Power and other Machinery; Bicycles  
and Fire Escape.  
42 Oviatt, Mrs. M.....Paintings  
17 Owens, John B.....Pottery, Terra Cotta and Stone Ware

## P

- 22 Pacific Spring and Mattress Co..... Furniture, Mattresses, etc.  
19 Pacific Coast Screen Co ..... Magic Window Screen  
38 Pacific Bell Telephone Co.....Telephones  
31 Pacific Ink Factory.....Inks, Mucilage and Blueing  
19 Pacific Portable House Co... Model of House  
31 Pacific Fertilizing Co.....Fertilizers  
3-13 Pacific Stove and Iron Works.....Stoves, Ranges and Castings  
4-16 Pacific Saw Manufacturing Co .....Saws and Edge Tools  
40 Palmer, Mrs. Fanny .....Quilts  
40 Parent, Mrs. H. H. .... Miniature Furniture  
36 Patrick, B. H. & Co .....Picture Cards, etc.  
38 Parkhurst, V. S. W.....Forsyth's Scales, all sizes  
13 Pander, E..... Oil Stoves and Heaters  
31 Parisian Polish Co... Furniture Polish  
40 Pollak, Mrs. Jno.....Quilt  
27 Peake, Chas. & Co.....Turkish Rugs  
40 Peterson, Mrs. A. N ..... Hand-made Tidies, Laces, Curtains, etc.  
24 Petersen, Peters.....Pony Brandy Keg  
5 Phelps, Foster & Co.....Carpet Renovating Works  
40 Phillips, Mrs. Henry.....Embroidered Skirt, Silk Cushion and Quilts  
31 Pioneer Varnish Works.....Varnishes, Gums and Brushes  
1 Pinneo, G. D .....National Fuel Economizer  
28 Poheim, Joe.....Men's Furnishing Goods  
46 Pouyal, John .....Cut Flowers, Foliage, Plants, etc.  
40 Prydz, Mrs. Eliza.....Embroidered Rug and Towel  
7 Purcell, G. M..... Washing Apparatus

## R

- 40 Raveley, Mrs. S. W.....Bedspread  
32 Ranlett, Horace D ..... Native Copper Ore  
20 Regan & Neuman.....Pianos and Sheet Music  
31 Reaves, Mrs. M. A..... Hair Tonic  
31 Reyburn, Wm. H. & Bros.....Compressed Shavings for Kindling Fires  
6 Redstone, A. E.....Quartz Mill and Concentrator  
32 Richardson Bros.....Postage Stamps, Cards, etc.  
38 Riley, J. H. W.....Calligraphs  
36 Roberts, Jno. W. & Co.....Advertising Cards  
22 Roehnert, F.....Rolling Top Mattress  
29 Rogers, A .....Ostrich Feathers



## Class.

- 36 Roach, John... Optical Goods, Surveying and Mathematical Instruments  
 5 Robinson, A. .... Wire Fence Machine and Model of Jack Truck  
 40 Roebuck, Mrs. Eliza.....Silk and Wool Quilt  
 39 Robertson, J .....Wilsonia Magnetic Garments  
 31 Ruesser, Chas. .... Unfinished Buggy, not Ironed or Painted  
 47 Runyon, Sol.....Display of Fruit

## S

- 3 San Francisco Tool Co....Iron Lathes, Shapers, Gear Cutter, Drills,  
 Milling Machine, etc.  
 19-44 Sanborn, Vail & Co... General Display of Mirrors, Pictures, Frames,  
 Engravings and Fancy Ornaments.  
 11 Sacramento Iron Fence Co.....Model of an Iron Fence  
 1 Sanders, W. A.....Steam Engine  
 46 Saywell, Thomas.....Cut Flowers and Dahlias  
 18 Sack, W. M.....Automatic Water Closet and Filter  
 2-18 Sanford, A. B .... Pulsometer Pump, Steam and Hot Water Heater  
 19 Scovern & McCall.....Fret Saw Work  
 44 School of Design.. ....Pencil and Crayon Drawings  
 30 Seal Rock Tobacco Co.....Tobacco and its Manufacture  
 12 Selby Smelting and Lead Co...Lead and Tin Pipe, Sheet Lead, Shot, etc.  
 13 Segal, Adolph.....Cooking Cabinet  
 40 Seivers, Mrs. C.....Tidies, Hair and Tartan Flowers  
 37 Shepman, W. E....Replated Ware and Silver-Plated Amalgamating  
 Plates.  
 19 Simmons, W. H.....Painted Table Tops  
 17 Simmons, Robert.....International Paving Blocks  
 31 Slaven, H. B.....Fruit Salt and Yosemite Cologne  
 31 Smith, Dr. B. J. ....Caloric Vita Oil  
 4 Smyth & Watson.....Smyth's Patent Tree Feller and Log Saw  
 44 Smyth, W. H.....Mechanical Drawings  
 29 Snow, John F.....Re-finished Crape  
 31-35 Souther, Jos. N. & Co .. Green Ginger Brandy, Stomach Bitters,  
 Essences and Extracts.  
 36 Stowe, Mrs. J. W... ..Work of the Social Science Sisterhood  
 13 Spiers, M. E ....Portable Fruit Dryer and Heat Tender  
 5-36 Spaulding, Geo. & Co....Gordon Cylinder Printing Press, Type and  
 Specimens of Printing.  
 4 Spaulding, N. W....Circular Saw with inserted Teeth, "Spaulding's  
 Patent."  
 3 Studabecker & Loudon.....Tailors' Square  
 21 Studebaker Bros. Manufacturing Company.....Carriages, Phaetons and  
 Buggies.  
 20 Statham Piano Co.....Pianos  
 40 Stettin, Mrs. H.....Gold, Silk, Linen and Chenille Embroidery

## Class.

11 Stanley, James.....	Automatic Gate
31 Standard Soap Co.....	Soaps and Candles
31 Stoddart Bros.....	Preparations for the Toilet
40 Statham, Miss M. S.....	Fancy Paper Work
24 Stealey, Thos.....	Fruit Boxes
40 Staniels, Mrs. C. G.....	Linen Shirt
29 Stevenson, Martin.....	Model of Ship
14 Standard Box Co.....	Fruit Baskets
17 Sullivan, James.....	Marble Table Top

## T

22 Taylor, R. W.....	Sofa Bed and Lounge
26 Taylor, S. P. & Co.....	White and Colored Papers
40 Taylor, Miss Bessie.....	Embroidered Toilet Set
31 Thompson, Geo.....	Soda Fountain and Apparatus
18 Titus, J. T.....	Sewer Gas Trap
14 Truworthy, F. M., Mrs.....	Stencil Plates, Rubber Stamp Brands, etc.
6 Triumph Concentrating Co.....	Wet Concentrator
26 Tubbs & Co.....	Manilla and Sisal Rope and Cordage
6 Tustin, W.....	Quartz Pulverizer

## V

42 Vaughan, M. P.....	Painting
31 Vogeler, A. & Co.....	St. Jacob's Oil

## W

31 Wakeling, Mrs.....	Blood Purifier, Magnetic Oil, etc.
24 Wakefield Rattan Co.....	Rattan Furniture and Goods
9 Walkinshaw, Robt.....	Automatic Port Window
9 Watts, N. C.....	Model of Dry Dock
44 Warburton, Mrs. Mary.....	Crayon Portrait
31-32 Warren, Col.....	Eucalyptus Medicines, Seeds, Books, Curios, Pictures, etc.
20 West, Wm.....	Banjo
22 West Coast Furniture Co.....	General display of all kinds of fine Furniture
39 West, C. N.....	Electro-Medical Belts
38 West, R. B.....	Optical Goods
38 Wenzel, H.....	Pneumatic Clocks
11 West, W. F.....	Portable Grist Mill and Grain Chopper
18 Weed & Kingwell.....	Brass and Plumber's Goods, Bells, Lubricator, etc.
21 Weaver, T. J.....	Buggy
11-38 Wellington, B. J.....	Lawn Mower, "Perfect Hatcher" (Incubator,) Mushroom Spawn, Egg Food, etc.
13 Webster, W. W.....	Oil Stoves

## Class.

- 22-36 Whitney, Sumner.....Rotary Book Case and Law Books  
 31 Wheeler, Mrs. L. J.....Pastiles and Perfumery  
 21 Whitmore, E.....Buggies, Phaetons & Wagons  
 19-31 Whittier, Fuller & Co ...Lead and its Manufactures; Varnishes, Glue,  
 Ground and Prepared Colors, Prepared  
 Paint for General use; Artists' Materials,  
 Brushes, Plate Glass Mirrors, etc.  
 21 Willey, O. F....General display of Fine Imported Carriages  
 38 Wickson, G. G.....Eclipse Incubator and Artificial Mother  
 18 Wilson, W.....Gas Valve and Basin Trap  
 3 Williams, W. A.....Soldering Machine  
 7 Winters, Jno. D.....Golden Gate Clothes Washer  
 11 Wilz, John.....Pruning Shears  
 35 Wilmerding & Co.....Peruvian Bitters  
 16 Will & Finck.....Cutlery and Combs  
 7-13-18 Wiester & Co.....Household Goods and Utensils  
 5 Woodbury, Geo. E . . . . .Model of a Street-Sweeper  
 21-25 Woodward, R. B. & Co....Carriages, Harness, Saddlery, Whips,  
 Robes, etc.  
 32 Woodward, Wm . . . . .Natural History Specimens  
 40 Work, Miss Hattie L.....Quilt and Cushion  
 32-46 Woodward's Gardens ..Foliage, Plants, Ferns, Flowers, Animals and  
 Birds.  
 38 Woolhouse Bros.....Sunlight Gas Machine  
 13 Woodruff, Mrs. C.....Dish Washer  
 11 Woolsey, Jno. S....Steam Generator, Lawn Sprinklers, Cheese Vat,  
 Animal Gun.  
 33 Wulff, P . . . . .Mustard Sauce and Pickles  
 31 Wright, E.....Cough Balsam



# CATALOGUE

OF THE

## ART DEPARTMENT.

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### ROOM No. 1.

Title.	Possessor.
Japanese Decorative Art. ....	Ichi Ban

### ROOM No. 2.

Portrait (water color) .....	Oscar Kunath
Joaquin Murietta.....	Henry Raschen (after Nahl)
Geyser Peak.....	L. P. Latimer
Cypress Point, Monterey.....	H. Cleenewerck
Sheep's Head. ....	Mrs. Major Beck
Turkey.....	William Hahn
Grapes.....	Mrs. Major Beck
The Charcoal Burner's Hut.....	R. D. Yelland
Adobe House, Los Gatos.....	R. D. Yelland
Scene in Australia.....	Johnstone
Sand Dunes.. . . .	William Keith
Scene in Dresden.....	Arthur Nahl
Bull Calf (Virgil Williams).....	E. R. Garczynski
Landscape (William Hart).....	E. R. Garczynski
The Cascades (Thomas Hill).....	E. R. Garczynski
Mount Hood.....	William Keith
Mount Tamalpais.....	William Keith
Interior of Forest (Homer Martin).....	E. R. Garczynski
Sweet Corn (E. Wood Perry).....	E. R. Garczynski
Promise.....	William Keith
Clearing Away in Maine.....	William Keith
Clear Lake From Uncle Sam.....	William Keith
Mount Shasta.....	William Keith
Juliet in Friar Lawrence's Cell .....	Theo. Wores
Mount Shasta (Thomas Hill).....	Henry Raschen
Study .. . . .	Henry Raschen
Study.....	Henry Raschen
Costume of the Time of Louis Quatorze (A. Lesrel).....	E. R. Garczynski

Title.	Possessor.
Study .....	Henry Raschen
Study .....	Henry Raschen
Salmon Festival.....	Thomas Hill
The Huntress .....	Henry Raschen
Old Italian Town.....	Henry Cleenewerck
Glossy Starling.....	A. Nahl
Blue Bird. ....	A. Nahl
Wet.....	J. B. Wandesforde
Song Sparrow .....	Arthur Nahl
Foothill Scenery (William Keith).....	E. R. Garczynski
Mexican Cardinal .....	Arthur Nahl
In the Franconia Notch.....	Thomas Hill
Duck Shooting, San Mateo.....	Thomas Hill
Paper Mill Creek.....	Thomas Hill
Grapes .....	Mrs. Major Beck
Rescue of the Innocents.....	Thomas Hill
Royal Arches, Yosemite.....	Thomas Hill
Cattle Piece—Path by the Brook .....	Thomas Hill
Just Landed .....	Thomas Hill
Head.....	D. and E. Tojetti
Portrait .....	Tojetti
Little Calaveras Valley.....	J. B. Wandesforde
California Sheep Range .....	J. A. Harrington
"Dog on the Bullet" .....	J. A. Harrington
"We have Struck it Rich, Pard" .....	E. Narjot
Dolorosa.....	C. W. Beals
Portrait, Professor John Le Conte (Henry Raschen).....	State University
Head.....	Henry Raschen
Portrait (Old Man).....	Henry Raschen
The Return from the Bear Hunt.....	William Hahn
The Studio Corner.....	Theo. Wores
Two Studies.....	Theo. Wores
Charley Jack (Portrait).....	E. Narjot
Four Portraits.....	E. Narjot
Two Runaways .....	E. Narjot
"Do I Like Butter?" .....	E. Narjot
Elaine (Domenico Tojetti).....	Tiburcio Parrott
Yosemite Valley. ....	Henry Cleenewerck
Waiting for the Artist.....	Mrs. Danielwitz
The Arab—After Schreyer.....	Mrs. Danielwitz
Interior Wood Scene .....	Nellie Hopps
Hollyhocks.....	Miss Nellie E. Burrell
MacDonall's Creek (L. P. Latimer).....	Miss Ellen Cooper
La Femme et le Pot au Lait.....	J. Brouchoud
Roses .....	J. B. Wandesforde

Title.	Possessor.
Portrait, John Brown.....	S. W. Shaw
Portrait, Gen. Grant.....	S. W. Shaw
Cattle.....	William Hahn
Idle Moments (Capri).....	Emily Ryder
Hollyhocks.....	Mrs. Weister
Lake Nianza (Africa).....	Norton Bush
Head (Study).....	Oscar Kunath
Peonies.....	A. Frassi
Tulips.....	A. Frassi
The Pioneer.....	J. A. Harrington
Trout Fishing.....	J. A. Harrington
Il Trovatore.....	J. A. Harrington
Fishing.....	J. A. Harrington
Sunset on Mt. Shasta.....	Fred Schafer
Adopted Design for Garfield Monument (F. Happersberger) Garfield Mon. As.	
The Last Arrow (Statuary).....	F. Happersberger
Exhibit of the Society of Decorative Art of California.	
The Spirit of Mischief.....	Cecil Romer
Landscape. ●.....	F. Richardt
Portraits.....	E. Narjot
Orpheus and Eurydice.....	Arthur Nahl
<p>The original life-size picture was painted by J. August Nahl, Jr., in 1816. Subject, taken from the Greek Mythology, representing Orpheus, the Musician, returning from the infernal regions, after having implored Pluto, (the God of Hell,) to return to him his wife Eurydice who was concealed there. Pluto (charmed by the music of Orpheus) grants the request on condition that he look not upon her until they reached the light; which promise he was unable to fulfill; for, feeling the touch of her hand upon his arm he could not resist the temptation to look. This unfortunate circumstance causes his wife to disappear from him for ever.</p>	
Saxonian Baroness.....	Arthur Nahl
Slightly Æsthetic.....	Cecil Romer
Scene on the Chagres River.....	Chas. Nahl
Moonlight in Yosemite.....	Thomas Hill
The Wreck.....	Thomas Hill
Napa Valley.....	William Keith
Interior (Wood Scene).....	Nellie Hopps
Roman Girl.....	Emily S. Ryder
Study—Still Life.....	A. Joullin
Frosty Morning.....	E. Butler
Oriental Beauty.....	T. and E. Tojetti
Pigs.....	Mrs. N. J. Holt
Portrait.....	Mrs. N. J. Holt
The Shepherdess.....	E. Butler
Landscape.....	L. P. Latimer
Interior, (Soquel Creek.).....	L. P. Latimer
Studio Corner.....	F. Schafer



Title.	Possessor,
Girl in Poke Bonnet.....	E. R. Peters
Cherub from Raphael's Sistine Madonna (Julia Schulte), aged 15 years and 6 months .....	Mr. Schulte
Bachelor's Buttons.....	Emily Ryder
Virgin Mary.....	M. P. Vaughn
After Carlo Maratti.....	Mrs. D. Bixler
Study (Eggs).....	Mrs. D. Bixler
Early Morning (Mexico).....	Mrs. J. H. Holt
Rejected.....	Mrs. H. J. Holt
To the Rendezvous.....	Mrs. J. H. Holt
On the Lookout. ....	Mrs. J. H. Holt
Rev. R. Mackenzie (Geo. H. Burgess) .....	Rev. R. Mackenzie
Maud Branscombe.....	Geo. H. Burgess
Fannie Davenport .....	Geo. H. Burgess
Portrait, Water Color.....	Geo. H. Burges
Five Portraits.....	Oscar Kunath
Painting.....	Mrs. Stevenson
Cherub from Raphael's Sistine Madonna (Julia Schulte), aged 15 years, 6 months.....	M. Schulte
Fruit.....	Volscosa
Cupid (Mary E. Howe).....	C. L. Wangaman
Portrait.....	P Bolivar
Two Portraits.....	Astley Cooper
Cleopatra's Barge . ....	Astley Cooper
Uncle Sam Mountains.....	Jos. A. Bayless
Mount St. Helena.....	Jos. A. Bayless
Point Bonita.....	Jos. A. Bayless
Golden Gate.....	Jos. A. Bayless
A Farm on Lake Geneva.....	T. E. Parks
Benares on the Ganges .....	Aug. Schoeft
Purissima Falls.....	Jos. A. Bayless
Our Patron Saints.....	Addie L. Ballou
Captain Jack Crawford.....	Addie L. Ballou
Oil Painting.....	Mrs. E. Hendricks
Portrait.....	Mrs. A. Simpson
The Gypsy Fortune Teller.....	T. E. Parks
Fern Picture.....	Miss N. P. MacPherson
The Monarch of the Glen.....	Claude Hamilton
Flowers.....	Mrs. H. W. Bennett
Lilacs.....	Mrs. H. W. Bennett
Scene in the Blue Ridge.....	Claude Hamilton
One of the Four Cantons.....	Claude Hamilton
Fern Picture.....	Miss N. P. MacPherson
Contemplation.....	Claude Hamilton
Austin Creek .....	T. E. Parks

Title.	Possessor.
The Combat.....	Claude Hamilton
King Fisher.....	Mrs. H. W. Bennet
Ten Portraits (J. Z. Dudley).....	Dudley & Rhoades
Christopher Columbus.....	August Schoeft
Fortuna.....	August Schoeft
Portrait, Judge McKee (Albert Jenks).....	Judge McKee
Portrait, Miss Woodward.....	Albert Jenks
Portrait, H. Raymond (Albert Jenks).....	H. Raymond
Portrait, Miss S. Jones (Albert Jenks).....	Miss S. Jones
Portrait, Moses Hopkins (Albert Jenks).....	Moses Hopkins
Portrait, G. S. Bangs (Albert Jenks).....	Mrs. Bangs
Portrait, G. L. Johnson (Albert Jenks).....	A. Baldwin
Portrait, Mrs. Lampe (Albert Jenks).....	Theo. Lampe
Portrait, R. Dennison (Albert Jenks).....	Dr. Dennison
Portrait, Bob Ingersoll.....	Albert Jenks
Portrait, Emelie Melville.....	Albert Jenks
Portrait, Wm. Lampe (Albert Jenks).....	Wm. Lampe
Portrait, Judge Sharpstein.....	Albert Jenks
Portrait, Miss Hopkins (Albert Jenks).....	Wm. S. Hopkins
Portrait, Master Malone (Albert Jenks).....	Aug. Malone
Portrait, Miss Parks (Albert Jenks).....	A. S. Baldwin
Portrait, Rev. Dr. Specker.....	Albert Jenks
Portrait, Judge Garber.....	Albert Jenks
Portrait, Dr. Hardy.....	Albert Jenks
Portrait, Bishop Kip.....	Albert Jenks
The Old Oaken Bucket.....	Blanche Cohn
The Orphans.....	Blanche Cohn
Flowers.....	Blanche Cohn
Scene in Santa Cruz Mountains (Wilson Taylor).....	Mrs. E. J. Taylor
Outside the Golden Gate (Wilson Taylor).....	Mrs. E. J. Taylor
Portrait (A. E. Wilson).....	M. E. Barnes
Placques in Oil.....	Miss M. E. McCormick
Pansies.....	Nellie E. Jones (pupil of B. L. Cohn)
Study (Wilson G. Taylor).....	Wm. J. Irwin
The Broken Cup (Harry L. Cohn).....	B. L. Cohn
Landscape.....	Blanche Cohn
Judith.....	E. Reitle
Placque (Flowers).....	Mrs. Wm. Gallagher
Flowers.....	Mrs. Wm. Gallagher
Resurrection of Christ (Unknown).....	D. V. Walsh
Portrait, Miss S. Wood.....	Emily S. Ryder
Portrait, Garfield.....	Emily S. Ryder
Portrait, Bishop Kip.....	Emily S. Ryder
Portrait, Donna L. Tinoco.....	H. Borneman
Portrait, Donna Emilia (wife of the President of Costa Rica) water color.....	H. Borneman

Title.	Possessor.
Portrait, Gen. Don T. Guardia (Pres. Costa Rica) .....	H. Borneman
Portrait, Pres. Barrios, Guatemala.....	H. Borneman
Nine Portraits, Water Colors.....	H. Borneman
Roses.....	Mrs. R. J. Fay
Poppies.....	Miss Annie Goldwater
Plaque, Morning Glories.....	Miss Curry
Moss Rose Buds.....	Miss E. J. Morton
Portrait, Water Colors.....	Mrs. E. C. Hatch
Vase and Bunch of Roses.....	Mrs. E. C. Hatch
Dog's Head.....	Miss Annie Kane
Cliff Beach.....	Mrs. E. C. Hatch
Plaque of Roses .....	Miss T. Franklin
Guardian Angel.....	Herman Cohen
Basket of Lilacs.....	Mrs. E. C. Hatch
Panel of Rosebuds.....	Miss Dutton
Blue Bird, Water Color.....	Mrs. E. C. Hatch
Roses.....	Miss Sara H. Fernandez
Plaque of Lilies.....	Miss T. Franklin
Mt. Hood.....	Mr. Frank Capp
Sunset.....	Mrs. E. C. Hatch
Plaque of Poppies.....	Mrs. E. C. Hatch
Flower Piece.....	Ettie Seaton
Rose Panel.....	Mrs. E. C. Hatch
Vase of Flowers.....	Alice Levy
Landscape.....	Mrs. M. H. Lovely
Portrait (Water Color).....	Mrs. E. C. Hatch
Panel, Morning Glories.....	Miss Ettie Leaman
Roses (Miss M. M. Shepherd).....	Mrs. Shepherd
Oil Painting.....	Geo. W. Adams
Painted Placques.....	Miss E. Watson
Oil Painting.....	Mrs. F. C. Brownlee
Oil Painting.....	David V. Walsh
Studies and Penmanship.....	By Pupils of H. Michelson
Studies and Penmanship.....	By Pupils of Carl Eisenschimmel
Studies and Penmanship.....	By Pupils of P. A. Espina
Six Medley Pictures.....	Mrs. B. F. Ingals
Photographic Views.....	O. V. Lange
Specimens of Penmanship.....	By Pupils of California Commercial College
Crystalline Portraits.....	J. D. Van Sant
Studies in Oil and Water Color.....	Chas. Prosch
Specimens of Penmanship.....	By Pupils of Heald's Business College
Hair Work Pictures.....	L. P. Federmeier
Ornamental Designs.....	By G. Gorla
Crayon Portrait.....	Miss C. E. Usher
Painting.....	Mrs. E. C. Dills



Title.	Possessor.
Specimens of Penmanship.....	Leszynsky's Business College
Crayon Drawing.....	Mrs. Mary Washburton
Drawing, Ecce Homo, Pen and Ink ...	E. McD. Johnstone
Drawing, Infliction, Pen and Ink.....	E. McD. Johnstone
Drawing.....	Esther Alexander
Drawing.....	Miss L. Smith
Studies.....	Miss L. Smith
Crystalline Portraits.....	Miss L. Smith
Five Crayon Portraits.....	Scott Tidball
Crayon Portrait.....	Wm. Shew
Three Crayon Drawings.....	W. G. E. C. Ayres
Lace Work.....	Mrs. H. Lusk
Porcelain Painting.....	Mrs. Helen Brodt
Porcelain Painting.....	By Pupils of Mrs. Helen Brodt
Exhibit of the Decorative Art Union.	
Porcelain Painting.....	Miss A. Hasler
Painting on Silk, etc.....	Miss A. Hasler
Curios .....	Mrs. F. B. Hubbard
Porcelain Painting.....	Miss Eva McCormick
Lace Work.....	Mrs. Bessie Taylor
Table Top.....	W. H. Simmons
Ornamented Table Top....	Mrs. Theresa Corbett
Pigeon Cote.....	Emil Lampe
Landscape .....	Blanch L. Cohen
Portraits.....	Miss M. Oviatt
Five Flower Pieces .....	Miss Sarah Duprey
Oil and Water Color Paintings .....	Mrs. M. H. Moore
Picture .....	Francis Ballinger
Portrait.....	Miss M. C. Waller
Portrait, Children (Amelia Simpson) .....	J. Simpson
Six Placques.....	E. S. Ryder
Moonlight .....	E. S. Ryder
Two Flower Pieces.....	A. E. Rogers
Fruit Piece.....	A. E. Rogers
Still Life.....	A. E. Rogers
Hooked.....	Samuel M. Brookes
Landed.....	Samuel M. Brookes
Pencil, Ink and Crayon Drawings (original) .....	Pupils of School of Design
Pencil and Crayon Drawing.....	Pupils of the Public Night School (S. F. School Department)

# PREMIUM LIST.

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AWARDS OFFERED AND NAMES OF THE JURORS  
FOR THE

## SEVENTEENTH INDUSTRIAL EXHIBITION.

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NOTE.—Only the heading of the Classes and number of Premiums offered in each Class are given in this report, as they were published in full previous to the Fair.

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### DIVISION 1. MACHINERY.

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CLASS 1.—*Steam Engines, Boilers and Appliances.*

EIGHTEEN PREMIUMS.

1 Gold Medal.  
6 Silver Medals.

6 Bronze Medals.  
5 Diplomas.

JURORS:

G. L. PIERCE.

W. H. BIRCH.

CLASS 2.—*Hydraulic Machinery.*

THIRTEEN PREMIUMS.

1 Gold Medal.  
7 Silver Medals.

3 Bronze Medals.  
2 Diplomas.

JURORS:

M. ARNOLD.

C. A. BYERS

E. H. THOMPSON.

CLASS 3.—*Machinists' Tools and Metal Working Machinery.*

TWENTY-ONE PREMIUMS.

2 Silver Medals.

6 Diplomas.

13 Bronze Medals.

JURORS:

JAMES PATTERSON.

I. M. SCOTT.

IRA P. RANKIN.

SAM'L. DINSMORE.

CLASS 4.—*Wood-Working Machinery.*

TWENTY-EIGHT PREMIUMS.

1 Gold Medal.

9 Silver Medals.

13 Bronze Medals.

5 Diplomas.

JURORS:

OSCAR LEWIS.

GEO. HULL.

J. HAMMOND

CLASS 5.—*Printing and Miscellaneous Machinery.*

SEVENTEEN PREMIUMS.

1 Gold Medal.

10 Silver Medals.

4 Bronze Medals.

2 Diplomas.

JURORS:

O. LEWIS.

T. E. KEOUGH

CLASS 6.—*Mining Machinery and Appliances.*

FOURTEEN PREMIUMS.

1 Gold Medal.

10 Silver Medals.

3 Bronze Medals.

JURORS:

J. R. SCUPHAM,

WHEELER N. FRENCH,

A. HALSEY,

W. J. COLLINS

CLASS 7.—*Laundry Machinery.*

SEVEN PREMIUMS.

1 Silver Medal.

2 Bronze Medals

4 Diplomas.

JURORS:

T. E. KEOUGH,

OSCAR LEWIS.

CLASS 8.—*Fire Apparatus and Appliances.*

EIGHT PREMIUMS.

1 Gold Medal.

4 Silver Medals.

1 Bronze Medal.

2 Diplomas.

JURORS:

ABNER DOBLE,

JAS. McCORD,

W. M. ALLEN,

B. GALLAGHER.

J. SOLOMON.

CLASS 9.—*Marine.*

TWELVE PREMIUMS.

4 Silver Medals.

6 Bronze Medals.

2 Diplomas.

JURORS:

OSCAR LEWIS,

T. E. KEOUGH.



CLASS 10.—*Sewing, Knitting and Braiding Machines and Looms.*

ELEVEN PREMIUMS.

1 Gold Medal.

7 Silver Medals.

3 Bronze Medals.

JURORS :

MRS. D. H. EDWARDS,

M. LACHMAN,

DAVID C. SMITH.

CLASS 11.—*Agricultural Machinery.*

THIRTY-SIX PREMIUMS.

1 Gold Medal.

8 Bronze Medals.

11 Silver Medals.

16 Diplomas.

JURORS:

GEO. W. FOGG,

N. W. SPAULDING,

I. M. SCOTT.

## DIVISION 2.

### MANUFACTURED PRODUCTS AND METALS.

CLASS 12.—*Iron, Steel and Lead.*

EIGHTEEN PREMIUMS.

3 Gold Medals.

3 Bronze Medals.

9 Silver Medals.

3 Diplomas.

JURORS:

ISAAC CORY,

CHAS. L. BIGELOW,

ALBERT FOLSOM.

CLASS 13.—*Cooking, Heating and Ventilating.*

TEN PREMIUMS.

1 Gold Medal.

3 Bronze Medals.

3 Silver Medals.

3 Diplomas.

JURORS:

A. S. IREDALE,

P. J. O'CONNOR.

CLASS 14.—*General Hardware.*

TEN PREMIUMS.

3 Silver Medals.

3 Bronze Medals.

4 Diplomas.

JURORS:

W. M. BETTS,

MUNSON RUSSELL.

CLASS 15.—*Fire and Burglar-Proof Safes and Locks.*

FOUR PREMIUMS.

1 Gold Medal.

3 Silver Medals.

(Consolidated with Class 14.)

CLASS 16.—*Cutlery and Edge Tools.*

## THREE PREMIUMS.

1 Gold Medal.

2 Silver Medals.

## JURORS:

H. N. COOK,

RICHARD YOUNG.

CLASS 17.—*Grates and Mantels, Marbles, Artificial Stone, Earthenware, Glassware, etc.*

## SIXTEEN PREMIUMS.

1 Gold Medal.

4 Bronze Medals.

8 Silver Medals.

3 Diplomas.

## JURORS:

JOHN WRIGHT,

H. T. HOLMES.

CLASS 18.—*Brass Work, Gas and Lamp Fixtures, Plumbers' Goods, etc.*

## FOURTEEN PREMIUMS.

1 Gold Medal.

4 Bronze Medals.

8 Silver Medals.

1 Diploma.

## JURORS:

C. R. STEIGER,

RICHARD SAVAGE,

WM. CURLETT.

## DIVISION 3.

## MANUFACTURED PRODUCTS, WOOD OR WOOD AND IRON.

CLASS 19.—*Carpenters', Joiners', Carvers', and Stair Builders' Work, Ornamental Glass, Painting, etc.*

## TWENTY-ONE PREMIUMS.

2 Gold Medals.

7 Bronze Medals.

4 Silver Medals.

8 Diplomas.

## JURORS:

H. C. MACY,

R. P. CUNNINGHAM,

HORACE FLETCHER,

ANDREW WILKIE.

CLASS 20.—*Musical Instruments.*

## FIVE PREMIUMS.

1 Gold Medal.

3 Silver Medals.

1 Bronze Medal.

## JURORS:

MRS. FANNIE LEAL,

HENRY L. DAVIS,

IRA P. RANKIN.

CLASS 21.—*Vehicles and their Attachments, Children's Carriages, Hobby Horses, etc.*

TWENTY-THREE PREMIUMS.

2 Gold Medals.  
4 Bronze Medals.

12 Silver Medals.  
5 Diplomas.

JURORS:

JAS. McCORD,  
ABNER DOBLE,

W. M. ALLEN,  
B. GALLAGHER.

JACOB SOLOMAN.

CLASS 22.—*Furniture, Upholstery, etc.*

EIGHTEEN PREMIUMS.

1 Gold Medal.  
5 Bronze Medals.

5 Silver Medals.  
7 Diplomas.

JURORS:

A. D. SHARON,

N. HUNTER,

W. J. T. PALMER.

CLASS 23.—*Billiard Tables.*

FIVE PREMIUMS.

1 Gold Medal.  
2 Bronze Medals.

1 Silver Medal.  
1 Diploma.

JURORS:

F. A. WILL,

N. P. COLE,

C. J. ROBINSON.

CLASS 24.—*Wooden Ware, Wire Goods, Willow Ware, etc.*

TEN PREMIUMS.

5 Silver Medals.

3 Bronze Medals.

2 Diplomas.

JURORS:

W. N. MILLER,

COLIN M. BOYD.

## DIVISION 4.

### MANUFACTURED PRODUCTS, ANIMAL AND VEGETABLE FABRICS.

CLASS 25—*Boots, Shoes, Rubber Goods.*

TWENTY-THREE PREMIUMS

3 Gold Medals.  
8 Bronze Medals.

6 Silver Medals.  
6 Diplomas.

JURORS:

C. L. HASKELL,

ELKAN WASSERMAN.



CLASS 26.—*Hemp, Cordage, Paper, Furs, etc.*

FIFTEEN PREMIUMS.

1 Gold Medal.

6 Silver Medals.

4 Bronze Medals.

4 Diplomas.

JURORS:

C. J. HENDRY,

J. K. WHITE.

CLASS 27.—*Woolens, Dress Goods, Carpets, Cotton, etc.*

THIRTEEN PREMIUMS.

2 Gold Medals.

2 Bronze Medals.

9 Silver Medals.

JURORS:

M. LACHMAN,

D. C. SMITH,

MRS. JENNIE McLEOD.

CLASS 28.—*Gentlemen's Furnishing Goods, etc.*

ELEVEN PREMIUMS.

7 Silver Medals.

4 Diplomas.

JURORS:

DAVID C. SMITH,

M. LACHMAN,

MRS. JENNIE McLEOD.

CLASS 29.—*Ladies' Furnishing Goods, Dresses, Cloaks, Millinery, etc.*

THIRTEEN PREMIUMS.

6 Silver Medals.

1 Diploma.

6 Bronze Medals.

JURORS:

MRS. HORACE WILSON,

MRS. M. E. PENDLETON,

MRS. C. B. THOMPSON.

## DIVISION 5.

## CHEMICAL AND NATURAL PRODUCTS.

CLASS 30.—*Tobacco.*

FOUR PREMIUMS.

3 Silver Medals.

1 Bronze Medal.

(Consolidated with Class 31.)

CLASS 31.—*Chemical and Pharmaceutical Products.*

TWENTY-SEVEN PREMIUMS.

2 Gold Medals.

14 Silver Medals.

8 Bronze Medals.

3 Diplomas.

JURORS:

EDGAR BRIGGS,

W. T. WENTZELL.

W. B. RISING,

ROBERT WALSH.

J. WALCOM.

CLASS 32.—*Geology, Mineralogy, Zoology, etc.*

TWELVE PREMIUMS.

9 Silver Medals.

2 Bronze Medals.

1 Diploma.

(Consolidated with Class 31.)

## DIVISION 6.

### FOOD PRODUCTS.

CLASS 33.—*Groceries, Flour, Meats, etc.*

TWENTY-TWO PREMIUMS.

1 Gold Medal.

4 Bronze Medals.

11 Silver Medals.

6 Diplomas.

JURORS:

DR. W. D. JOHNSON.

P. D. CODE.

D. D. SHATTUCK.

CLASS 34.—*Wines.*

THIRTY-EIGHT PREMIUMS.

1 Gold Medal.

37 Diplomas.

JURORS:

DR. J. I. BLEASDALE.

A. D. BELL.

F. PHONDORF

CLASS 35.—*Fermented Products.*

THREE PREMIUMS.

3 Diplomas.

JURORS:

J. D. THOMPSON,  
CALEB COATES.

MICHAEL KANE.  
J. HARRISON.

## DIVISION 7.

### LIBERAL AND DECORATIVE ARTS.

CLASS 36.—*Printing, Lithographing, etc.*

THIRTEEN PREMIUMS.

4 Silver Medals.

5 Bronze Medals.

4 Diplomas.

JURORS:

B. F. STERETT.

CHAS. L. SCUDDER

CLASS 37.—*Gold, Silver and Plated Ware, Watches, Clocks, Jewelry, Bronzes, etc.*

TWELVE PREMIUMS.

1 Gold Medal.

3 Silver Medals.

5 Bronze Medals.

3 Diplomas.

JURORS:

CHAS. L. SCUDDER.

F. H. McCONNELL.

CLASS 38.—*Scientific Apparatus.*

TWENTY-ONE PREMIUMS.

1 Gold Medal.

8 Silver Medals.

9 Bronze Medals.

3 Diplomas.

JURORS:

W. J. WATERS.

F. A. FRANK.

J. P. McMURRAY.

DR. WM. HAMMOND.

CLASS 39.—*Surgical and Dental Instruments and Appliances.*

SEVEN PREMIUMS.

2 Silver Medals.

3 Bronze Medals.

2 Diplomas.

JURORS:

DR. HENRY GIBBONS, JR.,

DR. R. BEVERLY COLE.

CLASS 40.—*Hair Work, Needle Work, Wax Work, Embroidery, etc.*

FORTY-EIGHT PREMIUMS.

1 Silver Medal.

3 Bronze Medals.

44 Diplomas.

JURORS:

MRS. P. B. CORNWALL.

MRS. J. H. GILMORE.

MRS. GEO. SPAULDING.

MRS. A. R. WELLS.

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## DIVISION 8.

### FINE ARTS.

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CLASS 41.—*Paintings in Oil and Water Colors.*

ONE THOUSAND DOLLARS IN CASH AS PREMIUMS.

JURORS:

EDWARD BOSQUI.

MAJ. T. J. BLAKENEY.

MISS NELLIE A. WATERHOUSE.

MISS NELLIE HOPPS.

MRS. O. F. WILLEY.

CHAS. L. SCUDDER.

CLASS 42.—*Ceramic Art.*

THIRTEEN PREMIUMS.

1 Silver Medal.

12 Bronze Medals.

(Consolidated with Class 41.)



CLASS 43.—*Sculpture, Statuary and Carving.*

EIGHT PREMIUMS.

2 Silver Medals.

6 Bronze Medals.

JURORS:

J. J. REY.

J. K. WILSON.

E. McD. JOHNSTONE.

CLASS 44.—*Engravings, Drawing and Penmanship.*

EIGHTEEN PREMIUMS.

3 Silver Medals.

15 Diplomas.

(Consolidated with Class 43.)

CLASS 45.—*Photography.*

TEN PREMIUMS.

1 Gold Medal.

4 Silver Medals.

5 Bronze Medals.

(Consolidated with Class 43.)

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## DIVISION 9.

### HORTICULTURE.

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CLASS 46.—*Plants, Trees and Flowers.*

SEVEN PREMIUMS.

3 Silver Medals.

3 Bronze Medals.

1 Diploma.

And Three Hundred and Fifty-five Dollars in Cash.

JURORS:

E. J. WICKSON.

PROF. E. H. HILGARD.

A. C. ADAMS.

MRS. A. L. MANN.

MRS. CHAS. FARNAM.

CLASS 47.—*Fruit.*

SEVEN PREMIUMS.

1 Gold Medal.

3 Silver Medals.

3 Bronze Medals.

And One Hundred and Sixty-Five Dollars in Cash.

(Consolidated with Class 46.)

# REPORTS OF THE JURORS

UPON THE

## VARIOUS ARTICLES EXHIBITED

AT THE

### SEVENTEENTH INDUSTRIAL EXHIBITION.

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*The recommendations made by the Jurors and addressed to the Board of Managers, as to what the Premiums should be, have been omitted from the Report. The awards, as made by the Board, are printed in Italics, as is all other language not used by the Jurors. For full list of Articles Exhibited see alphabetical list of Exhibitors.*

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#### CLASS I.—STEAM ENGINES, BOILERS AND APPLIANCES.

Your Committee appointed to award premiums in Class No. 1, beg leave to submit this their final report:

1st. Vertical Engines and Boilers combined in motion. The competitors were J. Hendy and W. H. Ohmen. Having no facilities at our command to determine by a scientific test the amount of duty performed, compared with weight of fuel used, your Committee selected the following competitive points upon which to base their estimate of superiority:

Design, workmanship, steadiness at high piston speed, and adaptability to general use. And after a careful, thorough and impartial inspection of each engine exhibited, your Committee were unanimous in recommending the award to W. H. Ohmen.

*Silver Medal.*

2d. Vertical Engines in motion.

The competitors were J. Hendy, W. H. Ohmen and J. B. Jardin; and for the same reason as above, your Committee also recommend the award to W. H. Ohmen.

*Silver Medal.*

3d. Hoisting Engines and Boilers combined.

W. H. Ohmen being the only exhibitor of this class of Engines, we recommend that he be awarded a

*Bronze Medal.*

## 4th. Straw-burning Engines.

As Messrs. Hawley & Bro. were the only parties to enter for competition, we recommend that they be awarded for the Rice Straw-burning Engine a  
*Silver Medal.*

5th. P. H. Jackson & Co. . . . . Device for the more complete combustion of coal.

This device merits more than a passing notice. It was the only device of the kind on exhibition, and could properly be classed as a Smoke Consumer. Your Committee gave it as thorough an investigation as the means at their command would permit, and was satisfied that there had been a step in the right direction.

Mr. P. H. Jackson, the Inventor, proposes to return the unburnt gases to the furnace and supply them with the necessary amount of oxygen for their combustion, and at the same time introduce sufficient fresh, but hot, air for the combustion of the coal on the grate.

Your Committee were aware that to test what was claimed by Mr. Jackson, or to thoroughly comprehend the value of this device, it would require a very scientific and elaborate course of experiments; but to stimulate further investigation of so important a subject, we would recommend an award.

*Silver Medal.*

6th. For Waters' Steam Engine governors, Flanged Globe-valves and Safety-valves, your Committee would recommend a premium to W. T. Garratt.  
*Bronze Medal.*

7th. Weed & Kingwell. . . . . For the best Tallow Lubricator for Engine Cylinders.  
*Diploma.*

8th. Lewellyn Steam-Heater and Condensor Co., (no competitor.)  
*Diploma.*

9th. Central Gas-light Co. . . . . Otto Gas Engine, (no competitor.)  
*Bronze Medal.*

10th. Central Gas-light Co. . . . . For Caloric Engine, (no competitor.)  
*Bronze Medal.*

11th. Occidental Foundry. . . . . For the best Grate Bar, California Make.  
*Diploma.*

H. S. Slocomb & Co . . . . . Dibble Lubricator.  
*Diploma.*

REMARKS—Apart from the foregoing, there were a few exhibits upon which your Committee declined to make any recommendation; they possessed neither merit or novelty, and it is supposed by the public that a premium is indicative of merit, and as said premium is always used for advertising purposes, the public is deceived thereby, and the deception apparently indorsed by the Mechanics' Institute.

Respectfully submitted,

G. L. PIERCE,  
WM. H. BIRCH,  
*Committee.*



## CLASS II.—HYDRAULIC MACHINERY AND STEAM PUMPS.

NOTE.—It will be observed there are three reports by this Committee, one signed by all three; then a majority and minority report on Steam Pumps. Much time and labor was given by the Committee in their examination, it extending over a period of three weeks. During the working test of Steam Pumps, Mr. E. H. Thompson, one of the Jurors, met with a painful accident, which confined him to his room for a number of months, and for a time threatened to be very serious.

We, the Committee, selected by your honorable body to test and report on Class 2, (Hydraulic Machinery, etc.), beg to submit the following as a partial report:

A. B. Sanford.....Pulsometer Pump (Eastern Invention)

It receives the steam in direct connection with the water. For simplicity and durability we recommend it. *Silver Medal.*

H. Kessler.....Regulator for Steam Pumps

Not in use; design good.

W. T. Garratt & Co.....The Worthington Water Meter (Eastern Invention)

Best in the market. *Bronze Medal.*

H. C. Langrehr.....Ship Pump (Cal. Invention)

Simple and efficient. *Silver Medal.*

J. Hendy.....Rotary Pump (Eastern Invention)

Does very good work under high rate of speed.

W. T. Garratt & Co.....Hooker's Patent Ship Pump

A first-class pump, in point of construction and durability.

F. W. Krogh & Co.....Plunger Pump

Two pumps on exhibition. Not entered for competition.

W. T. Garratt & Co.....Deep Well Pump

For deep well pump, in combination with Toothaker's Patent Air Cushion, the result is a success. *Silver Medal.*

Clott & Messe.....Deep Well, Fly-Wheel Pump (Cal. Invention)

For their exhibit, and the mechanical design (not entered for competition) we beg to recommend an award. *Silver Medal.*

J. H. Darragh.....Rotary Pump (Cal. Invention)

For simplicity, easy access to working parts, etc., we cheerfully recommend it. *Silver Medal.*

Wm. F. Toothaker.....Pneumatic Counter-Balance for Pump Rods of Deep Wells.

Latest California invention. *Silver Medal.*

M. ARNOLD, Chairman.

C. A. BYERS,

E. H. THOMPSON.

## REPORT ON STEAM PUMPS.

GENTLEMEN:

Your Committee on Class 2, Division 1, report as follows, on Premium No. 19: "For the Best Steam Pump, Direct and Double-Acting, of California make, in motion."

The exhibit of Steam Pumps was large, and creditable to the manufacturers. Two different patents were represented, both Californian inventions, to-wit:

The Hooker Steam Pump, exhibited and manufactured by Mr. W. T. Garratt.

The Dow Steam Pump, exhibited and manufactured by Messrs. Goss & Dow.

We examined into the merits of the two Pumps with a view to ascertain which was the best Pump for general purposes and practical working, and, in order to satisfy ourselves on these points, we required the manufacturers to furnish a Steam Pump, of their own make, of equal dimensions and capacity, and we have subjected them to several practical tests in order to determine. We have come to the conclusion that the Hooker Steam Pump possesses the highest merit.

1st. Its valve motion is positive and reliable in its action.

2d. It is simple, compact, not liable to get out of order, and none of its working parts are exposed outside to injury, being entirely contained in the steam-chest and cylinder.

3d. It requires no extra care or lubrication-points which we deem very valuable.

4th. The Hooker Steam Pump possesses the most effective cushion on exhaust steam, thereby causing the Pump to work smoothly and without jar, allowing the water valves to seat quietly at the end of each stroke when working under a heavy pressure. Also insures perfect safety in case of the accidental breaking of the water-pipes or other causes.

5th. We further consider the Hooker Steam Pump the best, on account of its simplicity, construction, durability, reliability and economy in running for all kinds of work. It has less outside working parts to be injured by falling stones or dirt in mining works, or exposed to the dust and grit of the engine or boiler rooms, than any other Pumps.

6th. We do not consider, practically, from our data accumulated and compiled, that any extensive mathematical problems which we might submit will in any sense change to the scientific or mechanical world the foregoing facts. We therefore recommend an award to the Hooker Steam Pump.

*Gold Medal.*

Respectfully submitted,

E. H. THOMPSON,  
C. A. BYERS.

GENTLEMEN:

I have the honor to submit the supplement to our report on articles exhibited in Class No. II., being a report of the test of Steam Pumps (California make,) competing for premiums at the above-named exhibition.

The Committee, failing to agree upon a report, a test was considered necessary.

There were two pumps to be tested, both of San Francisco manufacture, the Hooker Pump, manufactured and exhibited by W. T. Garratt and the Dow Pump, manufactured and exhibited by Goss & Dow.

The first test not being satisfactory, Mr. Garratt was allowed to withdraw his pump and substitute a new one in its place. The following data will show for itself. Nothwithstanding the Committee agree upon the data, they cannot agree upon the results, and therefore I, as Chairman of that Committee, submit the following for your consideration:

*Test of the Hooker and Dow Steam Pumps for comparative economy of Steam by Steam Cylinder displacement, each pump, size No. 7, being selected by the Committee:*

	HOOKEER.	DOW.
Diameter of Steam Cylinder.....	10 inches.	10 inches.
“ “ Water “ .....	6 “	6 “
Length of Stroke, nominal.....	12 “	12 “
“ “ “ maximum .....	12 <sup>5</sup> <sub>16</sub> “	13 <sup>9</sup> <sub>32</sub> “
Diameter of Piston Rod.....	1 <sup>5</sup> <sub>16</sub> “	1 <sup>1</sup> <sub>2</sub> “
“ “ Counter Rod, water end....	<sup>9</sup> <sub>16</sub> “	
“ “ “ “ steam “ ...		<sup>1</sup> <sub>2</sub> “
Displacement of Water Cylinder for each inch, Piston travel.....	27.4939	27.3909
Displacement of Steam Cylinder for each inch, Piston travel.....	77.8838	77.5583

In the *Nozzle tests* the same water and steam pressure was maintained, as well as the same nozzles being used for each corresponding test, thereby making the useful work performed by each pump equal.



DATA.  
STEAM PRESSURE EIGHTY POUNDS THROUGHOUT.

HOOKER.				DOW.			
Diameter Nozzle.	Water Pressure per Square In.	Actual Length of Stroke.	No. o Strokes.	Diameter Nozzle.	Water Pressure per Square In.	Actual Length of Stroke.	No. of Strokes.
1 inch.	75 lbs	11 <sup>3</sup> / <sub>16</sub>	148	1 inch.	75 lbs	12 <sup>7</sup> / <sub>16</sub>	131
1 "	100 "	11 <sup>5</sup> / <sub>16</sub>	166	1 "	100 "	12 <sup>9</sup> / <sub>16</sub>	150
1 "	135 "	11 <sup>3</sup> / <sub>8</sub>	184	1 "	135 "	12 <sup>23</sup> / <sub>32</sub>	174
<sup>3</sup> / <sub>4</sub> "	160 "	11 <sup>1</sup> / <sub>4</sub>	116	<sup>3</sup> / <sub>4</sub> "	160 "	12 <sup>1</sup> / <sub>2</sub>	108
<sup>5</sup> / <sub>8</sub> "	200 "	11 <sup>3</sup> / <sub>16</sub>	32	<sup>3</sup> / <sub>4</sub> "	200 "	12 <sup>5</sup> / <sub>16</sub>	33
Open discharge for Speed, 3 <sup>1</sup> / <sub>2</sub> In.	Nominal.	11 <sup>3</sup> / <sub>8</sub>	460	Open Discharge, 3 <sup>1</sup> / <sub>2</sub> inch Pipe.	Nominal.	12 <sup>1</sup> / <sub>2</sub>	460
Open to Atmosphere for Speed.		11	614	Open to Atmosphere for Speed.		12 <sup>25</sup> / <sub>32</sub>	692

TRIAL TO SHOW LEAKAGE OF WATER, PISTON AND VALVES.

*Steam*, 80 lbs.      *Water Pressure*, 220 lbs.

Time of Stroke, *Hooker*, 5 min. 27 sec.

Time of Stroke, *Dow*, 4 min. 35 sec.

It will be noticed that the leakage of the water piston and valves in the *Dow Pump* was considerably greater than in the *Hooker*, the latter being a new pump, built expressly for the test as allowed by the Committee. Therefore the *Dow* pump shows to have worked under a disadvantage in the water end, when under heavy pressure or slow speed, requiring an increase of piston travel to do the same work under those conditions. But the uniform advantage exhibited *under all conditions* in the economy of the steam end of the *Dow*, I respectfully submit, for your unbiased consideration, in tabular form, the results of the test by your Committee.\* I will add that the workmanship of both pumps is faultless; that the *Hooker* has the advantage of being the most compact, taking less length than its competitor, while the *Dow*, having its valve motion placed between the steam and water cylinders, leaves nothing to be desired in point of accessibility. The controlling action of the valve motion of this pump is excellent, and also the general design.

I respectfully submit this minority report on *Steam Pumps* to your honorable body, and believing justice will be done the winner, do hereby recommend that the award be given to the *Dow Pump* as being the *Best Direct Acting Steam Pump*, manufactured on the Pacific coast.

(Signed,)

M. ARNOLD,

Chairman of Committee on Class No. 2.

\* See next page.

Kind of Test.	Name of Pump.	Strokes per min.	Actual Length of Stroke in Inches.	Actual Travel in Inches.	Greatest Possible Travel in Inches.	Difference being Waste steam space in inches not traversed by Piston.	Actual Volume Steam Cylinder Displacement in Cubic Inches.	Total Volume Steam Cylinder Space in Cubic Inches.	Difference, being Waste Steam Space not traversed by Piston, in Cubic Inches.	Water Cylinder Displacement in Cubic Inches.
Nozzle Test: Discharge Equal.										
1 inch Nozzle, 75 lbs. Pressure.	HOOKE	148	11.1875	1655.75	1823.25	167.5	128956.1018	142001.6383	13045.5365	
	DOW	131	12.4375	1629.31250	1739.84375	110.53125	126366.7076	134939.3235	8572.6159	
1 inch Nozzle, 100 lbs. Pressure.	HOOKE	166	11.3125	1877.8750	2043.875	166.	146146.0409	159184.7517	13038.7108	
	DOW	150	12.5625	1884.375	1992.1875	107.8125	146148.9215	154510.6757	8365.7542	
1 inch Nozzle, 135 lbs. Pressure.	HOOKE	184	11.375	2093.	2265.5	172.5	163010.7939	176445.7489	13434.9555	
	DOW	174	12.71875	2213.0625	2310.9375	97.875	171641.3652	179232.3839	7591.0187	
$\frac{3}{4}$ inch Nozzle, 160 lbs. Pressure.	HOOKE	116	11.25	1305.	1428.25	123.25	101638.359	111237.5273	9599.1683	
	DOW	108	12.5	1350.	1434.375	84.375	104703.705	111247.6865	6543.9815	
$\frac{3}{8}$ inch Nozzle, 200 lbs. Pressure.	HOOKE	32	11.1875	358.	394.	36.	27882.4004	30686.2172	2803.8168	
	DOW	33	12.3125	406.3125	438.28125	31.96875	31512.9067	33992.3486	2479.4419	
Open discharge on Water, Steam 80 lbs. Open Throttle.	HOOKE	460	11.375	5232.5	5663.75	431.25	407526.9835	441114.3722	33587.3887	143861.8317
	DOW	460	12.5	5750.	6109.375	359.375	445960.225	473832.739	27872.514	157497.675
Open discharge On Air, Steam 80 lbs. Open Throttle.	HOOKE	614	11.	6754.	7559.875	805.875	524027.1852	588791.7925	64764.6073	185653.8006
	DOW	692	12.78125	8844.625	9190.625	346.	685974.0791	712809.2509	26835.1718	242262.2389

CLASS III.—MACHINISTS' TOOLS AND METAL-WORKING MACHINERY.

Your Committee, appointed to examine Class 3, beg leave to submit the following:

C. F. Marwedel.....Best Display of Machinists' Tools  
*Diploma.*

Pacific Stove and Iron Works.....Combined Vise and Anvil  
*Diploma.*

J. A. Studabecker.....Tailors' Square, combined with sweeps or curves  
*Diploma.*

W. T. Garratt.....Anderton's Improved Furnace and Forge Fan-Blower

The principal points in this invention consist of two supplementary Fans, made right and left hand, and placed on each side of the Blower, which feeds the air into the Blower, and thereby increases the pressure. It is simple in construction, and not liable to get out of order.  
*Bronze Medal.*

Abner Doble.....Best General Display of Blacksmiths', Miners' and Stone-cutters' Tools.

Particular attention is called by your Committee to the improved Tuyere Irons, and also to Drilling Machines.  
*Silver Medal.*

W. A. Williams.....Machine for Soldering all kinds of Cans

Combining so many convenient and meritorious points, and invented by a very young mechanic, the committee, by a unanimous vote, do recommend an award.  
*Silver Medal.*

J B. Jardine.....Best Power Shears and Punching Machines, and Best General Display of Boiler Tools.  
*Silver Medal.*

John Wright.....For Improved Pick, of California make, the Committee would recommend a  
*Diploma.*

San Francisco Tool Co....Best Combined Shaper and Planer, of a new and novel construction, namely:

1st. The tool moves at a uniform speed for all kinds of work.

2d. It works without noise, is durable, well provided against wear, and easily accessible.

3d. It is capable of doing well a great variety of work, both planing and shaping.

4th. The great range of its work—being adapted to plane from 36 inches wide by 19 feet long, to a single cut three-fourths of an inch long.  
*Bronze Medal.*

San Francisco Tool Co.....Best Gear Cutter and Milling Machine

Simple in design, composed of less parts than any others, and the most practical machine built for all classes of Spur and Bevel Gearing.  
*Bronze Medal.*



San Francisco Tool Co. . . . . Best Combined Drilling and Boring Machine

Of new and novel construction, consisting of both vertical and horizontal spindles, two tables, one with a vise one to revolve, and all working parts enclosed and simplified.

*Bronze Medal.*

San Francisco Tool Co. . . . . Best Lathes, 25 in., 30 in., 17 in., 16 in. swing

All these Lathes have a new and convenient method of driving a screw feed with friction clutches, and at the same time have less parts than ordinary lathes. The gearing is very heavy and strong, and designed to cut a screw from 5 to 18 threads with the change of a single wheel. All are fitted with compound rests.

*Bronze Medal.*

San Francisco Tool Co. . . . . General Display of Home-made Machinists' Tools

And the best and most valuable display in Class 3. Your Committee unanimously recommend the highest award.

In making this recommendation, your Committee desires to call special attention to this exhibit—the first of its kind ever made in our State. It marks a new advance in home industries, and should have all the assistance and support that lie within the province of the Mechanics' Institute.

The Shaper and Planer, Gear Cutter and Milling Machine, Drilling and Boring Machine, were all invented, patented and built in this city, and with the Lathes, Drills, etc., combine more new and valuable additions, which facilitate the construction of machinery, than are offered elsewhere.

*Gold Medal.*

IRVING M. SCOTT, Chairman.

SAML. DINSMORE,

JAMES PATTERSON,

IRA P. RANKIN,

Committee.

#### CLASS IV.—WOOD WORKING MACHINERY.

Your Committee, to whom was referred the question of awards in Class 4, beg leave to report that after having carefully examined the different articles we have concluded to recommend the following exhibits:

Pacific Saw Manufacturing Company. . . General Display of Cutters for Wood-Working Machinery.

This exhibit, occupying a wall space of 22x60 feet, is one of the finest displays ever shown in San Francisco of every description of saws and cutters for wood-work. In the opinion of your committee, it is well worthy of the first premium in this Class.

*Gold Medal.*

N. W. Spaulding. . . . . Circular Saw with Inserted Teeth

This well-known saw, of California invention and manufacture, is a great improvement in saws, and, in the opinion of this Committee, deserving of the highest award for such articles.

*Silver Medal.*

Smyth & Watson.....	Tree Feller and Log Saw <i>Silver Medal.</i>
Geo. Bull & Co .....	Portable Saw Mill, in Motion <i>Silver Medal.</i>
John Driver.....	Rotary Mortising Machine <i>Diploma.</i>
John Driver.....	Ratchet Brace <i>Diploma.</i>
Edward W. Tiftt ...	For ingenuity and taste in arranging exhibit of Saws and Tools. <i>Diploma.</i>

Respectfully submitted,

WM. HAMMOND,  
GEO. L. HULL,  
OSCAR LEWIS,  
Committee.

#### CLASS V.—PRINTING AND MISCELLANEOUS MACHINERY.

Your Committee appointed to examine articles in Class 5, also in Classes 7 and 9, after due examination, would report that among the many and various articles exhibited, we deem the following as especially worthy of mention, and of such award as the Institute may see fit to give:

F. W. Krogh & Co .....Eagle Wind Mill  
This mill is of California manufacture, well made, and deserves an award.  
*Silver Medal.*

Phelps, Foster & Co.....Renovator for Carpets, etc.' (Couch's Patent '')  
From specimens of work shown and testimonials, this invention seems to be of much value, as saving for use much of the carpet that is now thrown away on account of being badly soiled. The process not only cleanses the carpet, but restores the colors to nearly their former freshness, and at a cost but little more than charged for beating.  
*Silver Medal.*

B. E. Henriksen.....Automatic Safety Clutch for Elevators  
'This invention, now in practical operation on many elevators in this city and elsewhere, seems to be effective and fully able to arrest a falling elevator, whatever the weight. At ordinary speed, a loose arm on the elevator, connected with suitable mechanism, moves back and forth on a corrugated strip attached to the permanent guides. An increase of speed at once throws out the loose arm, allowing the catches or grips to instantly catch hold and stop the descent.  
*Silver Medal.*

San Francisco Chronicle.....Stereotype Plates and Moulds  
Finished and unfinished, showing the process used in printing the Chronicle; also specimens of the paper and other printing.  
*Silver Medal.*

Woolhouse Bros..... Sunlight Gas Machine

This machine was in operation during the Fair, producing a good light at a small cost. In the interior towns and country places it is extensively used.

*Silver Medal.*

Durkee & Moore..... Wire Coiling Machine for making Wire Mattresses  
*Diploma.*

George Spaulding & Co ..... Cylinder Gordon Printing Press, in operation

This press was in active use during the Fair, for printing the *Fair Daily*, a newspaper published in the building by sanction of the Board of Managers. It was always interesting to witness the working off of the evening edition and the eagerness with which visitors strove to get a copy for perusal or preservation.

Respectfully submitted,

OSCAR LEWIS,

T. E. KEOUGH,

Committee.

## CLASS VI.—MINING MACHINERY AND APPLIANCES.

The undersigned, your Committee on Machinery for Crushing Ores, Concentrators, etc., designated as Class 6, beg leave respectfully to report:

That in accordance with the written notice received from your Secretary, the Committee held its first meeting at your Pavilion on Saturday, September 2d, 1882, at 9 o'clock P. M., and organized by the election of J. R. Scupham as Chairman and A. Halsey as Secretary of the Committee.

The schedules of machinery entered in Class 6 were submitted by your Secretary to the Committee and discussed.

The Committee then and there decided that entries No. 16, 38 and 154 only required inspection by the Committee.

That all other entries should be submitted to practical test, and with that view the Committee at once consulted with all the parties having machinery embraced in Class 6, and made a mutual arrangement to make a test of their several machines on Tuesday, September 12, 1882, at 1 o'clock, P. M., on rock to be furnished by the parties themselves.

On the day appointed your Committee assembled, according to the foregoing mutual arrangement, and, taking 1 ton of quartz, put the same through a Dodge Crusher, set  $\frac{1}{2}$  inch opening, and then after thoroughly mixing the crushed ore, weighed out and gave 500 pounds to each of the following machines:

F. A. Huntington, Rotary Mill, wet crusher; W. I. Tustin, Rotary Mill, dry crusher; A. R. Redstone, 8-Stamp Mill, wet crusher; J. B. Jardine, 2-Stamp Mill, wet crusher, being all of the machines desirous of making the test.

The results of this test we have tabulated and appended to this report.



A second trial was permitted between the Huntington Rotary wet crusher and the Redstone 8-Stamp wet battery, on the 16th of September, on 500 pounds of rock, which result is also embraced in the tabulated statement.

Arrangements were also made by the Committee with all those having Concentrators on exhibition, and desirous of having a test made of their respective machines, to have suitable ore provided and prepared for a test to be made on Thursday, September 14, 1882, at 1 o'clock P. M.

And at the appointed time the committee again met, and, having put through 1500 pounds of ore in W. I. Tustin's Dry Crusher, gave 500 pounds of the finely pulverized ore or dry pulp to each of the following Concentrators:

W. B. Farwell's Dry Concentrator, Patten Wet Concentrator; Triumph Concentration Co. Wet Concentrator, being all of the machines desirous of making the test.

The results of this test we have also tabulated and append to this report. The material used in making each test was as nearly alike, when given to each machine respectively, as the Committee could possibly make it.

From the tabulated results of the tests of Quartz Mills, it will be seen that the Huntington, Tustin and Redstone Mills each yielded a *result of about 2½ tons per horse power per 24 hours.*

That the Jardine Mill fell below this result was probably the fault in the management of it more than in the machine itself.

The above result would leave the choice between these machines to depend on the condition in which the pulp is required to be in for the subsequent process to be used in beneficiating the ore.

The trial of the Concentrators, however, shows decided advantages in favor of the Triumph machine.

The Farwell machine being a Dry Concentrator, has the peculiar advantage of being specially adapted to use in arid localities.

But where water can be obtained concentration can be much more perfectly effected, as appears from the tests herein made and tabulated; and in such a situation the Triumph Concentrator is a most efficient machine.

Report of Working Test of Quartz Mills Pulverizers and Concentrators, Mechanics' Institute Fair,  
San Francisco, September 12th, 1882, in CLASS 6.

MACHINE TESTED.	Description.	No. and Weight of Stamps.	Horse Power.	Speed or Drop per minute.	Pounds Ore Worked.	Time. H. M.	No. of Screens	Rate per 24 Hours. Tons.	Drop in Inch's	Rate per Stamp or Roll.	Remarks.
F.A. Huntington	Rotary Wet Crusher.	Three of 200 lbs.	6	100	500	25	Slot 40	14 <sup>2</sup> <sub>5</sub>		4 <sup>2</sup> <sub>5</sub>	And 2.25 tons per Horse Power; Second Trial Sept. 16th, 1882, and 3.07 tons per horse power.
								18.46			
W. I. Tus tin	Rotary Dry Crusher.	1 Roller 470 lbs. and 1 rol'r 340 lb	1 <sup>1</sup> <sub>2</sub>	36	500	1 39	40	3 <sup>159</sup> <sub>230</sub>		1 <sup>809</sup> <sub>1000</sub>	And 2.424 tons per Horse Power.
A. R. Redstone	Rotary Wet Stamp Mill and battery	Eight of 245 lbs.	2	80	500	52	Slot 40	6 <sup>923</sup> <sub>1000</sub>	4	865 100	And 3.43 tons per Horse Power; Second Trial made Sept. 16th, 1882, and 3.955 tons per Horse Power.
								7.91	4	1 <sup>977</sup> <sub>1000</sub>	
J. B. Jardine	Wet Stamp Mill and Battery.	Two of 200 lbs.	2	90	458	2 06	40	2 <sup>617</sup> <sub>1000</sub>	5	1 <sup>308</sup> <sub>1000</sub>	And 1.308 tons per Horse Power.





The Committee would therefore recommend the following awards, in accordance with your printed schedule in Class 6:

Best Ore Breaker in operation.....	M. B. Dodge <i>Silver Medal.</i>
Best Rock Drill.....	W. T. Garratt <i>Silver Medal.</i>
Best Air Compressor.....	W. T. Garratt <i>Silver Medal.</i>
Best Quartz Mill .....	A. R. Redstone <i>Silver Medal.</i>
Best Ore Feeder.....	J. Hendy <i>Bronze Medal.</i>
Best Almagamating and Crushing Pan.....	F. A. Huntington <i>Silver Medal.</i>
Best Dry Crushing Mill.....	W. I. Tustin <i>Silver Medal.</i>
Best Wet Concentrator.....	Triumph Con. Co. <i>Silver Medal.</i>
Best Dry Concentrator.....	W. B. Farwell <i>Silver Medal.</i>
Improved Tappet.....	Adams & Carter <i>Bronze Medal.</i>

All which is respectfully submitted.

J. R. SCUPHAM,  
W. J. COLLINS,  
W. N. FRENCH,  
ABRAHAM HALSEY,  
Committee.

## CLASS VII.—LAUNDRY MACHINERY.

Your Committee on Class 7—Laundry Machinery—would report that the display of those articles was much less than usual, owing, perhaps, to the fact that the number of United States patents on washing machines is about 1,600, and each year the labor of inventing something new increases. We make note of the following in this class:

Sarah Martin.....Ironing Table

This exhibitor was indefatigable in her explanations and efforts to impress visitors with the good qualities of her really useful and labor-saving invention.

*Diploma.*

Wiester & Co.....The Complete Washer

This invention can be used with any ordinary wash-tub. *Bronze Medal.*

Keystone Wringing Co...The Adams Wringer and Penn Fluting Machine

To both these exhibits we recommend an award. *Diploma to each.*

T. E. KEOUGH,  
OSCAR LEWIS,  
Committee.

CLASS VIII.—*Fire Apparatus and Appliances.*

Your Committee on Class 8 would report that we have examined the articles exhibited in this Class, and find as follows:

David Kerr.....Hose Cart

This is a fine specimen of workmanship combining lightness with strength, well-finished and having the latest improvements.

*Silver Medal.*

J. A. Griswold.....Fire Escape

In accordance with your premium list we recommend an award.

*Bronze Medal.*

W. T. Garratt.....Fire Hydrant

*Diploma.*

H. N. Cook.....Fire Buckets and Hose Pipe

These were made of Leather, strong and serviceable.

*Diploma.*

Respectfully submitted.

JAS. McCORD,

Chairman.

CLASS IX.—MARINE.

We, Jurors on Class 9, would report that but few articles enumerated in the premium list were exhibited, thus making our labors comparatively easy.

A. C. Watts.....Model of a Floating Dry Dock

This exhibit, about four feet square, seemed to work very satisfactorily, raising miniature vessels of considerable weight with ease. We had no means of seeing the principle carried out in raising ships, but should judge the invention to be one of merit and of great importance to this coast, where docks for repairing vessels are so scarce.

*Bronze Medal.*

Capt. George Cumming.....Model of a Four-masted Ship

This elegant piece of workmanship was about four feet long, and perfectly finished in every part, the spars being of ivory, the metal work and rigging being of coin silver. The maker devoted much of his time for six years in its construction. It is, without doubt, one of the finest models of a ship ever made.

*Silver Medal.*

J. W. E. Howe....Model of a Ship in the Arctic Regions

This was intended to depict a scene in the Far North, with a ship in winter quarters frozen in. The name of "The Jeannette" seemed far-fetched, as, at the time it was made, no one here knew where that ill-fated vessel was. It was a very pretty model, however, and worthy of recognition.

*Diploma.*

Robert Walkingshaw.....Automatic Port Window

"Those who go down to the sea in ships," and the steward in charge of

state rooms, will appreciate this invention, as it is claimed to entirely prevent the sudden entrance of water through a port hole when inadvertently left open, if a sudden storm arises or an unusually large wave comes along. The window is raised and fastened by a peculiar catch, which can be so set that only when the ship acquires an undue oscillating motion it will close, and fasten automatically. Therefore, in fair or moderate weather the window can be opened, and if the temperature will admit, left so until the sea gets rough enough to close it, which is intended to be just before the waves are high enough to wash in. The window on exhibition was full size, and worked satisfactorily.

*Diploma.*

Louis Brell.....Model of a Man-of-War

This was another fine model, and, as some great man has said, "In time of peace prepare for war," we recommend that this warlike piece of work receive a premium.

*Diploma.*

OSCAR LEWIS,  
T. E. KEOUGH,  
Committee.

## CLASS X.—SEWING MACHINES, KNITTING MACHINES, BRAIDING MACHINES AND LOOMS.

Your Committee on Class 10 beg leave to submit the following:

F. Chopi.....Darning Machine  
A new and ingenious invention for darning stockings and knit goods.

*Diploma.*

A. A. Fisher.....American Machine  
Highly recommended by your Committee for light running, and for the excellent work turned out by it. They also desire to make special mention of braiding, samples of which were examined by us and pronounced extremely fine work.

*Silver Medal.*

E. C. Bodley.....Victor Sewing Machine  
Recommended for its even and regular stitch.

*Diploma.*

Alexander Mackay.....Carpet Loom in operation  
In regard to this exhibit your Committee were more than pleased at witnessing its working during the Fair, and that they appreciate the enterprise of Mr. Mackay in placing it where the public had an opportunity of seeing a loom in motion.

*Silver Medal.*

MRS. D. H. EDWARDS,  
M. LACHMAN,  
DAVID C. SMITH,  
Committee.



## CLASS XI—AGRICULTURAL MACHINERY.

Your Jurors on exhibits in Class XI. have examined the same, and recommend awards to the following:

D. M. Osborne & Co.....	Display of Agricultural Machinery	<i>Gold Medal.</i>
D. M. Osborne & Co.....	Self-binding Grain Harvester in operation	<i>Silver Medal.</i>
D. M. Osborne & Co.....	Reaper and Mower with Self Rake	<i>Bronze Medal.</i>
Hawley Bros. Hardware Co.....	Buckeye Gang Plow (Pac. Coast Manuf.)	<i>Silver Medal.</i>
Hawley Bros. Hardware Co.....	Sulky Rake	<i>Bronze Medal.</i>
Hawley Bros, Hardware Co.....	Hay and Straw Cutter	<i>Bronze Medal.</i>
Hawley Bros. Hardware Co.....	Sulky Plow	<i>Diploma.</i>
Hawley Bros. Hardware Co.....	Lawn Mower	<i>Diploma.</i>
Byron Jackson.....	Harrow (Pac. Coast Manuf.)	<i>Bronze Medal.</i>
Byron Jackson.....	Derrick Fork Hoist	<i>Silver Medal.</i>
Hawley Bros. Hardware Co.....	Almond Huller	<i>Bronze Medal.</i>
Hawley Bros. Hardware Co.....	Challenge Feed Mill	<i>Diploma.</i>
Judson Manufacturing Co.....	Victor Mower	<i>Silver Medal.</i>
Geo. Bull & Co.....	Riding Cultivator	<i>Bronze Medal.</i>
Geo. Bull & Co.....	Walking Cultivator	<i>Diploma.</i>
Geo. Bull & Co.....	Side Hill Plow	<i>Diploma.</i>
Geo. Bull & Co.....	Plow for general uses	<i>Diploma.</i>
D. M. Osborne & Co.....	Reaper	<i>Bronze Medal.</i>
D. N. Hawley.....	Creamer, Churner and Butter Worker	<i>Diploma.</i>
R. G. Brush.....	"California Chief" Grain Cleaner	<i>Bronze Medal.</i>

T. A. Mudge. . . . .	" Wheeler " Fruit Canner <i>Bronze Medal.</i>
Batchelor & Wylie . . . . .	Harrow and Cultivator <i>Diploma.</i>
W. F. West. . . . .	Grain Chopper and Grange Grist Mill <i>Bronze Medal.</i>
A. La Jeunesse. . . . .	Harrow <i>Diploma.</i>
Hawley Bros. Hardware Co. . . . .	" Keystone " Corn Sheller <i>Bronze Medal.</i>
Hawley Bros. Hardware Co. . . . .	" Champion " Fan Mill <i>Bronze Medal.</i>
Hawley Bros. Hardware Co. . . . .	" Buckeye " Cider Mill <i>Diploma.</i>
J. S. Woolsey. . . . .	Cheese Vat and Lawn Sprinkler <i>Diploma.</i>
John Wilz . . . . .	Pruning Shears <i>Diploma.</i>
D. M. Osborne. . . . .	Mower and Reaper Knives <i>Diploma.</i>

G. W. FOGG,  
IRVING M. SCOTT,  
N. W. SPAULDING,  
Committee.

## CLASS XII.—*Iron, Steel and Lead.*

Your Committee on Class 12, after a careful examination, would report as follows:

We find the exhibit this year to be exceedingly interesting, and samples of products that are of the utmost importance to this coast, and equal in every way to the best manufactured elsewhere.

Selby Smelting and Lead Works . . . . . Lead Pipe, Sheet Lead, Shot, etc.

This well-known Company, as usual, had a fine display of their products. With facilities for the reduction of ore and the most improved machinery, their superior manufactures and extensive works are a pride to this city, and we recommend for them the highest award.

*Gold Medal.*

Abner Doble. . . . . Cast Steel Bars, flat, round and square  
*Diploma.*

W. T. Garratt. . . . . Tin, Copper and Antimony in Pigs, Phosphor Bronze, etc.

This exhibit of Metals used in his extensive foundry and works was interesting, and we trust the time is not far distant when this coast will be able to

smelt them at a profit, as the supply is inexhaustible. Phosphor Bronze is an alloy now extensively used throughout the world. Many of the European powers have conferred upon the inventors the highest honors attained by civilians. It was patented in the United States a few years ago and manufactured only at the works in Philadelphia. No other metal combines in so high a degree the conditions of toughness, rigidity, hardness and great elastic resistance.

*Diploma.*

California Iron and Steel Co.....Pig Iron, Ore and Casting

This exhibit consists of fine grades of Charcoal Iron in the pig as manufactured in the Company's works at Hotaling, Placer County, California, accompanied with samples of the ore from which the iron is made; also heavy car wheels, made from numbers three and four of this iron, by the Central Pacific Railroad Co. at Sacramento, and horse-car wheels of the same material made by Steiger and Kerr of San Francisco. Both makers exhibit wheels entire as well as broken, the fracture of which shows the chill to be of the most superior quality. The Union, Fulton, Golden State and Miner's and the Architectural Foundries also use this iron for work requiring a first-class quality of iron. The Judson Manufacturing Company use number two and three for making malleable iron, and numbers three, four and five for making rolls for rolling bar and plate iron; numbers one and two are used for foundry purposes. The universal testimony is that the iron of all grades is superior to any brand that comes to this market, and it will take the place of *Salisbury* for all car wheel or chilling purposes. This, its first exhibit in quantity, backed up with testimonials from the users of six thousand tons, justifies us in the opinion that the success of making pig iron of the best quality has been successfully accomplished, and this most important industry, added to the permanent wealth of the State and the effect upon other industries, cannot be over-estimated, as the certainty of a supply of first quality of pig iron forms the basis upon which to start manufactories at home, which class of goods have heretofore been imported. Based upon the supply of the quality of this iron, a Nail Mill, Tack Foundry and a finishing Nail Factory, a Malleable Iron Factory, a Rolling Mill and Steel Works are under active construction in Oakland at present.

The mine is located at Hotaling, Placer County, four miles from Clipper Gap Station, on the Central Pacific Railroad. It was first put in blast April 24th, 1881. The mine covers an area of one mile square, and furnishes Hematites and Magnetite ores, with some Chrome, all the ore being of high grade, free from Sulphur or Phosphorus, and at the deepest working of the mines contains 79 to 81 per cent. of iron; limestone lies parallel to the ore vein and readily fluxes with the metal. The fuel used is charcoal and is made on the Company's lands; they own nine thousand acres of timber lands. This enterprise was started by Egbert Judson, A. P. Hotaling and Irving M. Scott, and has since been incorporated as the California Iron and Steel Co.

Your Committee feel justified in giving the above facts by the magnitude of the enterprise and the great influence its success will exert upon the mechan-



ical industries of the Pacific Coast, and we do most cheerfully recommend the highest premium for the most valuable native product exhibited in the Fair.

*Gold Medal.*

Betts Spring Co.....Locomotive, Carriage and Car Springs

This business, like many other of our leading industries, commenced in a very small way. It was in 1868 that Mr. William M. Betts, the President of the Company, arrived in San Francisco, and began to make Carriage and Wagon Springs, doing most of the work with his own hands, assisted by one helper. It was soon noticed that the Springs made by Mr. Betts, in style and workmanship, excelled the imported ones, and even at that early day the "Betts" Spring began to win the enviable reputation which has since extended over the entire coast. In April, 1873, the Betts Spring Company was incorporated, since which time the business has become an important industry, giving employment to from 15 to 20 men, who, by the aid of extensive and costly machinery, work up annually upwards of 100 tons of steel into Springs worth over \$40,000. The reputation of the "Betts" Spring is now established in every town on the coast, and orders are received not only from all parts of this and neighboring States, but from the Hawaiian Islands, Mexico and British Columbia, and this extensive business is the result solely of the superior quality of the goods manufactured by the Betts Spring Company. Owing to the strict and constant supervision necessary to maintain their high standard of workmanship, requiring more than ordinary care and skill in their workmen, they cannot sell their goods at the same price as the imported Eastern Springs, in the manufacture of which the same care is not used. Unceasing vigilance is exercised, both in the selection of the best brands of steel and in the adoption of improved methods of manufacture.

The most important improvement in Spring making of the last twenty years is undoubtedly the "side lip" as adopted and perfected by the Betts Spring Co. This "side lip" is a small lip or projection thrown out at each end of every leaf, and bent over the leaf below, to keep it in place. This takes the place of the old-fashioned "nib" or "slot," which are used for the same purpose of keeping the leaves in place, but which, by weakening each leaf over the nib or slot, make the Spring liable to break there. The side lip obviates this danger, and by leaving every leaf a perfect and flawless piece of steel, with no weak spot, reduces the chance of breaking to a minimum. It is evident that the Betts Spring Company is destined to grow with the State, and in the near future to be one of our most extensive, as it is now one of our most flourishing and promising, business houses.

*Silver Medal.*

Occidental Foundry..... Car Wheels and Iron Castings

This exhibit consisted of two distinct classes of Iron Castings, namely, Car Wheels and Rough, or, more correctly, Unfinished Castings. These two classes differ in regard to the purposes for which they are made, the nature of the iron used in their manufacture and the points of excellence which would constitute them first-class Castings. The conditions necessary in a good car

wheel are: A proper proportion of chill to size of wheel; second, Extreme hardness of the flange and thread to resist the wear caused by friction when in contact with the rail or brake shoe; and, third, Softness and toughness in the arms and backing of the thread to resist strain in cooling and while in use, and also to support the hard chilled portion of the wheel, which must necessarily be brittle. The broken sections of the wheels show that these requirements have been successfully met; the soft portion of the wheel yielding readily to the file, while no impression can be made upon the chilled portion. It is also worthy of notice that these wheels are a California production throughout, the iron used being procured from the California Iron and Steel Company's works at Hotaling, Placer Connty. These wheels have stood the test of actual use during the past two years on many of the street and steam railroads of the State, and a large number have also been shipped to New Zealand for roads in that country.

The samples of the Pump Castings are worthy of notice as being fine specimens of intricate foundry work. They are free from all flaws or blow-holes, which would unfit them for work under high pressures, and are cast so clean and true to pattern that the machine work required to complete them is reduced to the lowest possible point. *Silver Medal.*

California Wire Works . . . . Iron, Steel, Copper, Tinned and Galvanized Wire Rope, etc.

The manufacture of Wire Rope on the Pacific Coast dates back to 1856, when Mr. A. S. Hallidie made a wire rope 1300 feet long on the Middle Fork of the American River, at American Bar, near where he was mining and where he extemporized the machinery, carbonized the wire, and manufactured this wire rope for the Bay State Quartz Mining Company for a gravity railway, to deliver the quartz from the mine to the mill. After which this gentleman established works on a small scale in San Francisco the following year, and gradually built up the business until he disposed of it to the California Wire Works.

At the present time the business of making Wire Rope has become one of the important industries of this Coast, and the capacity of these works is equal to any concern known.

The manufacture of Wire was started by this same gentleman in 1861, and continued on a small scale until the Pacific Wire Mill was organized in about 1870. These works continued up to about 1877, when, unfortunately, they were destroyed by fire, and, not finding the business profitable, they discontinued and sold their remaining effects to Mr. Hallidie, who erected another mill the following year. This was not found very profitable, and it was a question with him whether to discontinue or put up a more complete and extensive mill. In order to determine, he visited the Wire Mills of the Eastern States and Europe, and on his return decided to put up a new mill with all the modern improvements. This mill he constructed about three years ago at an outlay of \$45,000, and it has been doing a large and profitable business, having a capacity of 3,500 tons per annum.



This wire mill has been purchased likewise by the California Wire Works, and extensive additions are being made to it, as well as the Wire Rope Works. By the combination of the Wire Mill and the Wire Rope Works, the raw material is first made into wire and then into rope. About 4,000,000 pounds of iron and steel are at present annually consumed for this purpose.

From a small beginning, consuming not over 50 tons of material per annum twenty-five years ago, this branch of industry, by the patient perseverance of a man having confidence in the future, has grown up to consume over 2,000 tons annually, and gives employment to 125 men, finding bread for 600 mouths, and adding materially to the wealth and contentment of the people of the State.

*Gold Medal.*

Most respectfully submitted by the Committee,

CHARLES L. BIGELOW,  
ISAAC H. COREY,  
ALBERT FOLSOM.

### CLASS XIII—COOKING, HEATING AND VENTILATING.

We, the jurors in Class 13, respectfully report:

J. T. Myers & Co.....Oil Stoves

This firm makes a fine display of Oil Stoves for cooking and heating purposes, they being of superior make and handsome design. The Adams and Westlake Stove is one that looks and works well, with handsome furniture, and is non-explosive. The exhibitor claims that it is as near perfection as well can be. The firm is entitled to great praise for their enterprise and in keeping up with the times in their line of business.

*Diploma for best Display.*

W. W. Montague and Co.....Fire-place Heaters

These heaters, in connection with their mantels, was one of the finest displays of that kind of goods ever seen this side of the Rocky Mountains. The exhibit was worthy of a place in the Art Gallery.

*Silver Medal.*

Charles Brown & Son.....Ranges and Cooking Utensils

This was a fine display. The Winthrop Range is handsome, stands well in the community, and we think it first-class.

*Diploma for Winthrop Range.*

Mrs. M. E. Spiers.....Heat Fender and Fruit Dryer

This is a useful invention, intended to utilize the heat of an ordinary stove or range for drying fruit, etc.

*Diploma.*

Central Gas Light Co.....Gas Stoves

This was a fine display, showing how well and cheaply gas can be used for heating and cooking, the latter being demonstrated each day by the baking of bread, meat, etc.

(See Class 38 for award to them.)



Jean Lanthauime . . . . . Waffle Stove

This institution was run on the high pressure principle during the Fair, supplying the hungry with a piece of bread that was generally eaten with great relish, on account of its being called a waffle.

C. D. Harvey . . . . . Hot Water Radiator and Furnace

These Radiators are well adapted to public buildings and large dwellings, and of much merit. We regret they were not in practical working order.

A. B. Sanford . . . . . Steam and Hot Water Heaters

These heaters are worthy of mention, and useful.

*Bronze Medal.*

De Guerre & De Lano. . . . . Phoenix Adjustable Grate

For stoves and ranges.

*Bronze Medal.*

E. Pander . . . . . Oil Stoves

W. W. Webster . . . . . Oil Stoves

S. H. Linney . . . . . Steamers for Cooking

Adolph Segal . . . . . Cooking Cabinet

Wm. Gee . . . . . Patented Cups

The above fine exhibits are useful and worthy of mention.

Mrs. C. Woodruff . . . . . Dish Washer

Worthy of mention.

*Diploma.*

Oscar Levy . . . . . Stoves and Ranges and Coal Burners

The Persian Range exhibited by him is, in our judgment, a first-class article, handsome in design, large flues, heavy castings, and easily managed. The Coal Burners are of the latest and most approved patterns of construction and economical in the use of Coal.

Adam Koch . . . . . Copper Ware

This was a fine display.

*Bronze Medal.*

Perry & Co. . . . . Stoves, Ranges and Granite Ware

The Berwick Range is finely constructed, of elegant appearance, and arranged for either coal or wood by a combination grate. It has many improvements, and is first-class in every respect. The Economist Oil Stove, pattern of 1882, has many valuable improvements, and, taken as a whole, we think is as perfect as any on exhibition. As a non-explosive it will bear critical examination.

*Silver Medal for Best Display.*

*Diploma for Flat Iron Heater.*

Wiester & Co. . . . . Oil Stoves

The exhibit presented by this firm is very large, embracing a great variety of Stoves with other useful inventions for the use of the household. We find that the Fairy Queen Oil Stove possesses many points of superiority, and recommend an award for the following reasons: 1st. The oil tank is made of glass, enabling one to see when it is empty and to avoid an overflow when filling; it is also impervious to oil and cannot rust out. 2d. It has a water pan resting on the oil tank and surrounding the wick tubes, thus preventing the oil from becoming warm and the possibility of generating offensive and danger-

ous gases; the evaporation of the water moistens and purifies the atmosphere. 3d. They are put together entirely with screws, making it easy to get into the oil tank or duplicate any part. Some of the Stoves we examined have devices to prevent the gases from exploding, which are very good; but with these Stoves no gas is found when the water pan is kept filled.

*Diploma for Best Oil Stove.*

Pacific Stove and Iron Works.....Stoves, Ranges and Stove Ware

Owing to the fact that we are a new State, with but little encouragement from men of capital and short-sighted consumers, this exhibit is remarkable, showing that a spirit of enterprise is here that will eventually make this State one of the foremost in the Union.

The contributions of this Company, confined exclusively to the productions of their Foundry and Stove Works, 228 and 230 Main street, and the only industry of the kind in San Francisco, are highly commendable for their number and variety. The Stoves, Ranges, Hollow Ware and other articles, for smoothness, finish of the castings, and the excellence of the workmanship, compares favorably with similar Wares of Eastern manufacture.

This Company has manufactured about 2,000 Stoves and Ranges of different patterns and sizes, and now intend to introduce lines of Ranges, Cooking, Parlor and Office Stoves, specially adapted to the various needs of California and the Pacific Coast, and in furtherance of that design they have already manufactured and placed upon the market ten different sizes of Cooking Stoves and Ranges, having from two to six holes each, and twelve different sizes of Parlor and Office Stoves, coupled with a line of Hollow Ware, Dutch Ovens, Gem, Roll and Cake Pans in great variety. We most heartily recommend the highest award.

*Gold Medal.*

Respectfully submitted,

A. S. IREDALE,

P. J. O'CONNOR,

Committee.

(Since signing the above, Mr. O'Connor states that he is not satisfied with the award to the Fairy Queen Oil Stove, and withdraws his recommendation.)

#### CLASS XIV.—GENERAL HARDWARE.

Your Committee, after examining the articles in Class 14, would recommend that awards be given to the following:

Frank P. Latson.....Bronzed Hardware for Buildings  
*Diploma.*

Liddle & Kaeding.....Guns, Pistols and Sporting Materials  
*Silver Medal for Best Assortment of Fire Arms.*  
*Bronze Medal for Best Assortment of Fishing Tackle.*

J. S. Benn.....Artificial Flies, Trout and Salmon  
*Diploma.*

Mrs. F. M. Truworthy.....	Stencil Plates, Stamps and Burning Brands <i>Diploma.</i>
Jacobi & Short .....	“ Little Giant,” Lemon Squeezer <i>Bronze Medal.</i>
G. V. Blackman.....	Gonne’s Patent Door Knob <i>Diploma.</i>
Frank Webb & Co.....	Rubber Stamps <i>Diploma.</i>

WM. M. BETTS,  
M. RUSSELL,  
Committee.

## CLASS XVI.—CUTLERY AND EDGE TOOLS.

We, the undersigned Jurors on Class 16, Saws, Edge Tools and Cutlery, have carefully examined the articles displayed at the Mechanics’ Fair, and find a great amount of labor, ingenuity and skill displayed in the exhibit.

Pacific Saw Manufacturing Co.....Saws and Edged Tools

This firm exhibits a great improvement in the method of grinding crosscut, pit and handsaws. Their saws are ground tapering, thinner on the back edge than on the tooth, thereby clearing themselves when cutting with less set than when ground in the usual manner.

The blades for butcher saws we put to a severe test by winding them around our hands, and when released they sprung back perfectly straight. The temper in these saws is perfect. They also exhibit quite a variety of pruning saws, with improvements thereon. The bow saw has a detachable blade, which, by a simple contrivance, can be adjusted to cut at any angle. Also the curved saws, which cut backwards.

Their display of edge tools, straight and curved, are fair samples of mechanical skill. The edge of steel being welded to iron, makes it so it can be straightened after being tempered, and less liable to break when in motion. We have also examined the Improved Steel Saw Arbor, the journal of which is oval-shaped, thus leaving a cavity on each end of the journal, which is filled with oil, making it self-lubricating, and so lessening the chance of heating.

We would recommend that the highest award be given to this firm for the “ Best General Display of Saws,” as provided for under Class 4 of the Rules and Premium List. *Gold Medal. (See Class IV.)*

Also, that they have an award for the best assortment of Edge Tools, California make, as provided for in Class 16. *Silver Medal.*

N. W. Spaulding .....Circular Saw with Inserted Teeth

The large circular saw exhibited by Mr. Spaulding we find perfect in every respect, the inserted tooth being dove-tailed on both edges and riveted



securely into place, making it impossible to get loose and fly out. The inserted teeth are made with round corners, thus rendering the saw less liable to crack or break than if made with square corners.

*Silver Medal. (See Class IV.)*

CUTLERY.—It would seem that this time-honored trade, as shown at the 17th exhibition of the Mechanics' Institute of this city, had here reached a climax of perfection, which would render improvement almost superfluous. The history of human civilization and progress is more often illustrated by the condition of this art than by any other means. In fact, antiquarians, where every other vestige of a race was lost, have classified it by its cutlery. Hence, the accepted theories known as the Flint, the Bronze and the Iron ages.

The most critical part of the cutler's craft is the forging, and to master it without mould or measure, judging the heat as well, requires the eye of an artist and the nerve of a blacksmith. During a recent investigation of the British Parliament into the state of the arts, an English cutler made the following display of his skill: He took a bar of steel, and in presence of the committee forged with great rapidity a number of penknife blades, which he passed around as they cooled. The blades were then submitted to a microscopic test, and were found to be exactly alike in every detail of shape and size. He next forged a razor blade, and shaved with it, just as it came from the anvil.

Will & Finck ..... Cutlery

The display of this firm has been the object of our closest inspection, and we find in it not only an exhibit of all that is excellent in tempering and finishing, together with chaste and durable adornment, but we also find a most commendable display of invention. They show, among many other interesting articles, a complete set of carvers, with every possible adjunct, such as skewer pullers and bone holders—the latter their own invention—and all of original and perfect design. This set is mounted in ivory, and sumptuously cased. Another set of equal merit is mounted in stag-horn, enriched with delicately carved medallions.

Too much cannot be said in praise of the well-directed efforts of this firm to take away the sting from the dreaded business of carving, and to enable one to carry it on in the spirit of the grace which generally precedes it.

Hunting Knives and small arms of the most tried and trusty temper, of well-balanced structure and solid grip, further attest the versatility of this firm in every branch of their trade.

We take pleasure in recommending for Messrs. Will & Finck awards for the best display of California-made Cutlery, and for the best Carving set.

Will & Finck also exhibit a full line of Horn Combs of their own manufacture. These are of perfect styles and bear the unmistakable impress of custom work in their general smoothness, strength of base and careful selection of material. This display especially commends itself to the Institute, whose great province it is to foster all new and useful enterprises.

Will & Finck are the Pioneers in this line, and find themselves able to compete in any market of the world where good work is demanded.

We commend this display as worthy of an award.

*Gold Medal for Best Display of Cutlery.*

*Silver Medal for Best Carving Set.*

*Bronze Medal for Display of Combs.*

Most respectfully we submit this, our report,

H. N. COOK,

RICHARD YOUNG,

Committee.

CLASS XVII.—GRATES AND MANTELS—MARBLES, ARTIFICIAL STONE,  
EARTHENWARE, GLASSWARE, ETC.

Your Jurors, appointed to examine exhibits in Class 17, beg leave to submit the following:

W. W. Montague & Co.....Marbleized Iron and Wood Mantels

For this beautiful display we recommend an award.

*Silver Medal.*

Gladding, McBean & Co....Fire Brick, Drain and Sewer Pipe, Chimney  
Tops, etc.

*Silver Medal for Sewer Pipe.*

*Bronze Medal for Chimney Tops.*

*Diploma for Fire Brick.*

John B. Owens.....Terra Cotta and Yellow Ware

*Silver Medal for Terra Cotta Ware.*

*Bronze Medal for Yellow Ware.*

Robt. Skinner....Asphalt Paving Blocks of the International Pavement  
Company of New York.

These blocks have every appearance of being a most excellent material for the purpose for which they are designed. They are apparently hard and tough, and are said to be almost noiseless and to afford a fine foothold.

The blocks are also said to create no dust, a virtue which should make them especially appropriate to this city, in which prevailing high winds, during a large portion of the year, always causes an intolerable nuisance.

We cheerfully recommend the paving blocks to your consideration as worthy of special Honorable Mention.

Respectfully submitted,

JOHN WRIGHT,

H. T. HOLMES,

Jurors.

## CLASS XVIII.—BRASS WORK, GAS AND LAMP FIXTURES, PLUMBERS' GOODS, ETC.

We, the undersigned Committee appointed to examine and report upon the Exhibits of Class 18, herewith take pleasure in submitting the result of our investigations:

J. A. Griswold..... Lamp Filler

This Lamp Filler is without doubt one of those ingenious and simple inventions which will be hailed with delight by every housekeeper.

*Silver Medal.*

Weister & Co..... Little Giant Water Filter

We believe this possesses considerable merit and is worthy of special mention.

*Diploma.*

T. Ambron..... Model of Castle in Zinc

This Model is quite a creditable combination of mechanical and artistic skill.

*Silver Medal.*

W. T. Garratt..... Brass Goods, etc.

This exhibit reflects great credit upon both master and man, and is especially deserving of high commendations, not only for the artistic display, but for the great care bestowed on the finish of the most minute detail, which is only to be found coming from the hand of the true machinist.

We regret exceedingly that this display was not in position on time, thereby debarring us from awarding the Premium, which otherwise it would have been our pleasant duty to perform.

*Silver Medal for Display of Bells.*

Weed & Kingwell..... Brass Work and Plumbers' Goods

The Goods displayed by this firm are of a high order of workmanship and speaks well for these enterprising machinists.

We recommend an award for Brass Work and Plumbers' Ware.

*Gold Medal for Best Assortment of Brass Work.*

*Bronze Medal for Plumbers' Goods.*

C. H. & G. W. Burr..... Slop Hoppers

These Hoppers are very complete in every particular, and will undoubtedly assist materially in reducing the emission of foul air and noxious gases from branch sewers.

*Silver Medal.*

W. M. Sack..... Water Closet and Filtering Faucet

This Water Closet is constructed on good scientific principles, and is therefore recommended an award.

The Filtering Faucet is quite simple in its construction, and will, no doubt, prove a great benefit as a water filter.

*Silver Medal for Best Water Closet.*

M. Boesch..... Lamps and Reflectors

This display reflects great credit on the proprietors. You may find almost every variety of Lamps and specimens of ornamental Copper and Zinc work in this beautiful exhibit, and it is therefore worthy of the highest award.

*Gold Medal for General Display.*



W. Wilson and J. T. Titus ..... Sewer Traps  
 These two Sewer Traps are each possessed of excellent merits, either of which when properly connected with a main sewer will undoubtedly materially lessen the flow of sewer gas into our houses. We have finally resolved, after mature deliberation, to recommend an award to each.

*Silver Medal to J. T. Titus for Best Sewer Trap.*

*Bronze Medal to W. Wilson for Best Basin Gas Trap.*

P. H. Jackson & Co. .... Patent Vault Cover and Girder  
 This Vault Cover will undoubtedly prove of great value in the construction of side-walks, vaults, etc.

*Silver Medal.*

GIRDER.—Various forms of cast iron Girders with wrought iron ties and struts has been from time to time constructed, but in no case have we met with such a successful combination of the two materials where such a marked advantage is taken of the greater resistance of cast iron to crushing, and of wrought iron to tearing than in the present instance. The most meritorious point in its construction is that the tie and arch are respectively in constant tension and compression, which we believe is almost impossible to obtain in any other form of Girder. The vast saving of material, the absence of all useless and damaging patch-work around the joints, and the great saving in cost over any other form of Girder will undoubtedly recommend it to the Architect and Engineer, and will, we believe, partially, if not entirely, supplant all other forms of Girder which enter into the construction of our most substantial brick buildings.

*Silver Medal.*

Respectfully submitted,

WILLIAM CURLETT,  
 RICHARD SAVAGE,  
 CHAS. R. STEIGER,  
 Committee.

## CLASS XIX.—CARPENTERS' JOINERS' CARVERS' AND STAIR BUILDERS' WORK, ORNAMENTAL GLASS PAINTING, ETC.

Your Committee on Class 19, after giving a careful examination to the exhibits submitted to them, respectfully report as follows:

John Mallon & Son.....Glass for Architectural Work

In this general display of stained, ground and bent Glass prepared for Architectural Work, we find some of the highest work of art, and of California production, which, if equaled, is not excelled by the finest work in that line of the old world. The process of producing such work, requires the genius, taste and long experience of a master hand, great care in the bending of large sheets of glass, and a masterly, artistic and delicate taste in the workmanship of cutting and embossing of the figures on plain and colored glass.

*Gold Medal.*

We would also most respectfully recommend an award for the display of cut and embossed Glass of California's best work.

*Silver Medal.*

S. & G. Gump ..... Mirror and Picture Frames

The exhibits made by this enterprising firm is a display of home industry, combining workmanlike finish, unequaled taste and excellence.

*Silver Medal.*

Louis Dampf ..... Picture Frames and Passe-Partouts

*Bronze Medal.*

Alex. Akstrand..... Newell Post

*Bronze Medal.*

J. R. Drew..... Stair Work

This display is of excellent workmanship and design, and, in our judgment, worthy of creditable mention.

*Diploma.*

J. W. Linney..... Two Paper Files and File Holders

*Diploma.*

C. W. & G. M. Burr..... Weather Strips

Your Committee consider them superior to any others in use, and very desirable in excluding dust in this climate.

*Diploma.*

Whittier, Fuller & Co..... Plate Glass Mirrors

The grand exhibits of Mirrors by this well-known leading firm of the Pacific Coast as a home industry is of great merit and unequaled excellence, and in the judgment of your Committee, superior to any other work of the kind ever imported or found on this coast, and deserving of the highest award.

*Gold Medal.*

Pacific Portable House Co..... Model of Pacific Portable Ventilated House

*Diploma.*

W. H. Simmons..... One Painted Table Top

*Bronze Medal.*

J. Hanson..... Step Ladder and Elevator Combined

*Diploma.*

Mrs. Theresa Corlett..... Ornamental Table Top

*Diploma.*

McEachern & Rowe..... Large Gold Frame, California Make

*Bronze Medal.*

Sanborn, Vale & Co..... General Display of Mirrors and Cabinet Brackets

This was a very fine and creditable display.

*Diploma for Cabinet Brackets.*

Pacific Coast Screen Co..... Model Patent Window Screen

*Diploma.*

James Hatch..... Frame done on Shaping Machine

*Diploma.*

- R. W. Brehm ..... Fancy Articles Turned from California Woods  
Very artistic and beautiful work, making a fine display of California  
industry. *Bronze Medal.*
- California Glass Works..... Patent Glass Roofing  
*Bronze Medal.*
- Scovern and McCall..... Scroll Saw Work  
*Diploma.*

Respectfully submitted,

H. C. MACY,  
HORACE FLETCHER,  
P. R. CUNNINGHAM,  
A. WILKIE.

Committee.

### CLASS XX.—MUSICAL INSTRUMENTS.

We, the undersigned Committee of Award in Class XX. of exhibits of the Fair, now in progress, having thoroughly examined the various instruments comprising said Class, beg to submit the following report and recommendations:

Statham Piano Co..... Pianos, California make

We find the Statham Piano Co. has made by far the finest display of California-manufactured pianos. We cheerfully recommend for this company the award, commending the instruments highly both for brilliancy and power of tone and equality of touch. Aside from the genuine merit of the instruments, Mr. Statham deserves great credit for the unique and really artistic cases in which the display is made. *Gold Medal.*

Hallett, Davis & Co..... Pianos

To this well-known firm of Boston we would recommend that an award be given for the finest display of Pianos, not of California manufacture. We would further recommend to your notice, as worthy of a special diploma, the patent appliance for raising the lids of square pianos, commending it as obviating heavy lifting, scratching of the wood, and jarring of the instruments.

*Silver Medal for Display.*

William West..... Banjo, Home Manufacture

This is a really fine Banjo of his own construction.

*Silver Medal.*

Brandlein & Scribold..... Zithers

These were of their own manufacture and fine instruments.

*Silver Medal.*

Respectfully submitted,

MRS. FANNIE A. LEALE,  
HENRY L. DAVIS,  
IRA P. RANKIN,

Committee.



# CLASS XXI.—VEHICLES AND THEIR ATTACHMENTS, CHILDREN'S CARRIAGES, HOBBY HORSES, ETC

We, the Jurors in Class 21, after a long and careful examination, submit the following as the result:

Studebaker Bros.....Buggies, Phaetons, etc.

This was a very fine display, and we give it honorable mention.

David Kerr....Two-Horse Truck, Four-Spring Wagon, Milk Wagons, etc.

*Silver Medal for Truck.*

*Silver Medal for Milk Wagon.*

*Silver Medal for Four-Spring Wagon.*

M. J. McCue.....Display of Carriages, Buggies and Rockaways

This we consider the best display of home manufacture, and recommend an award. *Gold Medal.*

Jerry Lowney & Son.....Dexter Buggies, Side-Spring Wagon, Milk Wagon and Coal Cart.

*Silver Medal for Coal Cart.*

O. F. Willey & Co.....General Display of Carriages and Buggies, Imported

*Silver Medal for best display of Imported Vehicles.*

R. B. Woodward & Co.....Carriages, Harness, etc.

This was a very fine display and worthy of special mention.

Carville Manufactory Co... ..Buggies, Rockaways, Phaetons, etc.

*Bronze Medal, best open Buggy.*

Ahlert Bros.....Monocycle

An ingenious piece of mechanism.

M. Kitzmuller .....Buggies and Rockaways

*Silver Medal for Best Top Buggy.*

Osborne & Alexander .....Bicycles

This was the best exhibit.

David N. Hawley.....Two-wheeled Phaeton

*Diploma.*

E. Whitmore.....Two-wheeled Side Bar Phaeton

*Diploma.*

J. A. Bilz.....Jump Carts

*Diploma.*

Geo. P. Kimball .....Two-wheeled Phaeton

Fine piece of workmanship.

A. W. Sanborn & Co.. .Thorough-brace, Express, Milk, Four-Spring and Business Wagons.

A very creditable exhibit, and we give it special mention.

M. H. Landers.....Man-catcher

This invention is designed to be attached in front of the wheels of rail-cars to prevent anything from getting under them.

*Diploma.*

The exhibits of A. S. Mersereau, Buggy Wagon; Edward Bowman, Eureka Dog Cart; G. G. Buckland, Patent Buckboard and Buggy; Charles Ruesser, Buggy not ironed or painted, and R. F. Bridwell, model of a new Cable Road, we make honorable mention of.

Respectfully submitted,

JAS. McCORD,  
W. M. ALLEN,  
ABNER DOBLE,  
B. GALLAGHER,  
JACOB SOLOMON,  
Committee.

## CLASS XXII.—FURNITURE, UPHOLSTERY, ETC.

We, the subscribers, a Committee on Furniture, do hereby recommend that awards be granted as follows:

West Coast Furniture Co ..... Best General Display of Furniture  
*Gold Medal.*

West Coast Furniture Co..... Best Set of Furniture, California Make  
*Silver Medal.*

Gilbert & Moore ..... Best Bedroom Set, California Manufacture  
*Silver Medal.*

West Coast Furniture Co.... Best Library Set, California Make  
*Diploma.*

Also the same for the best Easy Chair.  
*Diploma.*

R. W. Taylor ..... Best Extension Lounge and Sofa Bed  
*Silver Medal.*

Gilbert & Moore..... Best Assortment of School Furniture  
*Diploma.*

The Same..... Best Office Desk  
*Diploma.*

Pacific Spring & Mattress Co..... Best Spring Mattress  
*Bronze Medal.*

Also the same for the Best Metal Spring Bed Bottoms.  
*Diploma.*

George W. Clark & Co ..... Best Specimens of Decorative Wall Paper  
*Silver Medal.*

Hartshorn & McPhun ..... Best Display of Window Shades and Fixtures  
*Bronze Medal.*

J. Fredericks & Co.... Best display of Window Curtains, Cornices and Trim-  
mings. *Silver Medal.*

S. H. Herring..... Best display of Rustic Furniture  
*Diploma.*

Frank Laermans.....	Patent Combination Furniture <i>Silver Medal.</i>
Fred. Roehnert..	Rolling Top Mattress <i>Diploma.</i>
Theo. Erdin.....	Kitchen Cabinet <i>Diploma.</i>
D. G. Guibord.....	Ladies' Toilet Wardrobe <i>Diploma.</i>
Truman S. Clark & Son .....	Folding Iron Bedsteads <i>Bronze Medal.</i>
Sumner, Whitney & Co.....	Revolving Book Case <i>Diploma.</i>
J. S. Bennett.....	Bedroom Set, Hand-made <i>Bronze Medal.</i>

(The three last were not reported upon by the Committee.)

Respectfully submitted,

A. D. SHARON,  
WM. J. T. PALMER,  
NATHANIEL HUNTER,  
Committee.

### CLASS XXIII.—BILLIARD TABLES.

We, the undersigned Jurors on Billiard Tables, having examined the products herein described, respectfully recommend for award as follows:

J. M. Brunswick & Balke Co....	Best display of Billiard Tables, Style and Finish. <i>Gold Medal.</i>
The same, for Best Billiard Table Cushions.	<i>Bronze Medal.</i>
The same, for Best Billiard Table for Parlor use.	<i>Bronze Medal.</i>
The same, for the Best Balls, Cues and Racks.	<i>Diploma.</i>
P. Liesenfeld.....	Best California made Billiard Table <i>Gold Medal.</i>

Respectfully submitted,

F. A. WILL,  
N. P. COLE,  
ELIAS GILMAN,  
C. J. ROBINSON,  
Committee.



# CLASS XXIV.—WOODEN WARE, BRUSHES, WIRE GOODS, WILLOW WARE, ETC.

We, the Jurors in Class 24, would report that after examination we would recommend that the following receive such awards as the Board of Managers may deem proper:

Mattullath Manufacturing Co.....	Display of Cooperage
	<i>Gold Medal.</i>
California Wire Works.....	Wire Goods for the Household, Garden, etc.
	<i>Silver Medal.</i>
Wakefield Rattan Co.....	Rattan Furniture
	<i>Silver Medal.</i>
Figer Bros .....	Brushes, Brooms, Carpet Sweepers, etc.
	<i>Silver Medal for Best General Display of Brushes.</i>
	<i>Bronze Medal for Feather Dusters.</i>
	<i>Bronze Medal for Carpet-Sweeper.</i>
	<i>Diploma for Brooms.</i>
John C. R. Lange.....	Willow Ware
	<i>Silver Medal.</i>
Misses E. L. and M. A. Dietz, Oakland,.....	Patent Dust Pan and Crumb
Receiver	<i>Bronze Medal.</i>
Whittier, Fuller & Co.....	Paint and Varnish Brushes
	<i>Bronze Medal.</i>
Heuter Bros.....	Artist, and Varnish Brushes
We would make honorable mention of this display.	

COLIN M. BOYD,

W. N. MILLER.

Committee.

# CLASS XXV.—BOOTS, SHOES, LEATHER, RUBBER GOODS, ETC.

After examination we report the following:

Main & Winchester.....	Harness, Saddlery, etc.
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This extensive and fine display of home-manufactured goods is deserving of the various awards set apart for such articles. We particularly mention as being attractive and worthy of special notice, the very fine set of Dog-Cart Harness exhibited.

*Gold Medal for Best General Display.*

*Silver Medal for Best Set of Harness.*

*Bronze Medal for Best Saddle and Bridle.*

*Bronze Medal for Best Display of Whips.*

*Diploma for Best Horse Collar.*

R. P. Bryant.....	Patented Button for Shoes
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This is claimed to be a great improvement over the ordinary button and can be adjusted as easily by a child as an adult.

*Diploma.*

H. N. Cook.....Leather Belting, Hose, etc.

This display of Mr. Cook is the only one of the kind made this year, though, fortunately for the credit of this important home industry, his exhibit, by its extent and solid merit, amply illustrates the progress made in this line. The most striking feature is a set of driving belts for the California Sugar Refinery, the largest of which is a triple band 50 inches wide and 120 feet long. This enormous belt, probably one of the largest in the world, is so thoroughly cemented and welded together by a 120-ton hydraulic press, made expressly for such purposes that it is practically as one continuous piece of hide, insuring great power and durability. We also find exhibited some 400 feet of Leather Hose, together with suitable nozzles and other fire gear. Leather Hose is the only kind produced on this coast, and has superior claims for durability and economy, as it is manufactured of good, sound, heavy, oak-tanned leather, and by the best workmen.

We cheerfully recommend a suitable award to him.

*Silver Medal for Leather Belting.*

*Silver Medal for Hose.*

*(See also Class 8.)*

Respectfully submitted,

C. L. HASKELL,  
ELKAN WASSERMAN,  
Committee.

CLASS XXVI—HEMP, CORDAGE, PAPER, FURS, HAIR, ETC.

We have examined the various articles in Class 26, Cordage, Furs and Paper, and most respectfully recommend a special award to each in consideration of their fine and expensive display, which should be appreciated as assisting materially in making the exhibition so great a success.

Tubbs & Co.....General Display of Cordage  
*Gold Medal.*

H. Liebes & Co .....Furs, etc.  
*Silver Medal for Best Display.*  
*Bronze Medal for Carriage Robes.*  
*Diploma for Colored Furs.*  
*Bronze Medal for Sheep Skin Mats.*

S. P. Taylor & Co.....Paper, California Make  
*Silver Medal for Best Display.*

South Coast Mill (O'Neil Bros).....Straw Wrapping Paper  
*Diploma.*

Yours respectfully,

C. J. HENDRY,  
I. K. WHITE,  
Committee.

CLASS XXVII.—WOOLENS, DRESS GOODS, CARPETS, COTTON, ETC.

Your Committee, to whom was assigned the duty of examining and reporting on exhibits Class 27, beg leave to report that they have performed the duties entrusted to them, and submit the following as the result of their examination:

Alexander Mackay . . . . . Carpet and Loom

In regard to this exhibit your Committee desire to say that they were more than pleased at witnessing the working of a hand loom in the Fair, and that they appreciate the enterprise of Mr. Mackay in placing it in the Fair for the benefit of the public; and to add, that in the judgment of your Committee the Carpet being woven in that loom is equal in texture, style and finish to some of the Carpets made in the East, where machinery in that line has almost reached perfection.

*Silver Medal for Carpet.*

(See Class 10)

J. P. Evertz . . . . . List and Rag Carpets

This display of List and Rag Carpets is excellent in material, workmanship and appearance, and being of home production, we give it our highest praise.

*Silver Medal.*

Chas. Peak & Co. . . . . Turkish Rugs

A nice display of Turkish Rugs—a home production.

*Diploma.*

J. Fredericks & Co. . . . . Fine Furniture, Carpets, etc.

A most excellent display of fine Carpets, Easy Chairs and Bedroom Sets, the latter being particularly noticeable for beauty in design and workmanship.

*Silver Medal for Display of Carpets.*

Kittle & Co. . . . . Spool Thread

A highly creditable display of J. & P. Coats' well-known Thread.

Not for Competition.

Henry Doyle & Co . . . . . Spool Thread

A very fine display of Clark's O. N. T. Spool Threads are on exhibition by this firm, and deserves a medal; but as there is a difference of opinion between the agents of the two Threads in regard to whether they were for competition or not, your Committee will not make any recommendation, but leave it in the hands of the Directors to do as they see fit.

*Silver Medal for Best Display.*

All of which is respectfully submitted,

DAVID C. SMITH,

MRS. JENNIE MCLEOD,

M. LACHMAN,

Committee.



## CLASS XXVIII.—GENTS' FURNISHING GOODS, ETC.

Your Committee, on Exhibit, Class 28, beg leave to report the following.

Joe Poheim.....Fine Clothing and Cassimeres  
An excellent display of well-made Clothing and fine Cassimeres.

*Diploma.*

Jos. Figel.....Men's and Boys' Clothing  
An extremely fine display. *Silver Medal.*

J. W. Coppage.....Button Holes  
A fine exhibit of Button Holes. *Diploma.*

Bay City Manufacturing Co.....Hats  
This Company deserves, not only an award, but special mention also, for their most excellent display of Ladies' and Gents' Felt Hats, different in texture and design; and being a new industry in our State, we give it our highest commendation. *Silver Medal.*

All of which is respectfully submitted,

DAVID C. SMITH,  
M. LACHMAN,  
MRS. JENNIE McLEOD.

## CLASS XXIX.—LADIES' FURNISHING GOODS, DRESSES, CLOAKS, MILLINERY, ETC.

Your Committee on Class 29, after due examination, take pleasure in presenting their report, and trust it may meet with your approbation.

Mrs. Morrow & Co. ....The Griswold Corset  
The Griswold Corset is well tested and needs no good word; its own merit sufficiently recommends it. The Child Shoulder Brace and Corset combined, and the Special Corset "with band" are both excellent.

*Diploma.*

Mrs. L. Mish.....Millinery Goods  
A large collection of fine material, and very stylish work. *Silver Medal.*

Adolph Goehring.....Artificial Flowers.

The Artificial Flower exhibit is one of especial excellence. Many of the designs are marvels of taste and beauty. The workmanship betrays remarkable skill and care. The arrangement of the sprays is very artistic. The Silk Flowers deserve particular notice for their daintiness. The Roses, the Lilacs and Marguerites are of unusual beauty.

These productions prove the success achieved in the industry by the Exhibitor, and the Committee deem it worthy of the highest award.

*Silver Medal.*

A. Rogers.....Ostrich Feathers  
This is a large exhibit, and includes some very beautiful white feathers.

*Bronze Medal for White Feathers.*

John F. Snow.....Refinished Crape  
Too much cannot be said in praise of this work; it is perfection.

*Diploma.*

A. J. Balny .....Ostrich Feathers  
This exhibit is very noticeable. The feathers are perfectly finished, and the required coloring gives them a special excellence.

*Diploma for Colored Feathers.*

M. Freud & Sons.....Display of Ladies' Corsets  
A very fine collection of goods manufactured in San Francisco. The bridal Corsets are unsurpassed in daintiness of work and material. The plain ones combine comfort and durability. The French Corsets are perfect in elegance and style.

*Silver Medal.*

Mrs. M. H. Ober & Co.....Boston and California Dress Reform Garments  
Mrs. Ober exhibits original and sensible styles of Under-waists and Corsets; they are manufactured with a view to increasing health and longevity. They claim the attention of an intelligent observer. The Corded Corset and Emancipation Waist will be a boon to those who have freed themselves from the thralldom of extreme fashion. The Children's Corded Waist is her own invention, and needs only to be known by the public to meet with a sure recognition.

The Union Under-flannel, with various dress supporters, should be adopted both by those who favor dress reform, as well as by those who are indifferent to it. The Committee would respectfully suggest a testimonial for this meritorious exhibit.

*Diploma,*

MRS. M. E. PENDLETON,  
MRS. HORACE WILSON,  
Committee.

### CLASS XXX.—TOBACCO.

The Jury, to whom was referred Class 30, Tobacco, take pleasure in recommending the Seal Rock Tobacco Company of California the first Premium and the highest award of merit for the excellence of their product in quality as well as the great variety of styles manufactured by them. This branch of manufacture has been established within the past year, since which the excellence of its product has gained for them an enviable reputation, comparing favorably with the older established manufacturers of Virginia and other Eastern States, bidding fair in a short time to supercede many of them in supplying the home market, thus opening up another outlet for the employment of the youth of our city in productive labor. The number employed is about 250, and the demand for their tobacco is such as to require in the near future an enlargement of their premises to accommodate the growing trade. All their leaf tobacco is imported from Virginia, North Carolina, Kentucky and other tobacco-producing States, while all of the lumber for boxes, etc., is

obtained in California, thus giving employment to a great many outside of the factory. Should the time arrive when California shall produce leaf tobacco, adapted to the manufacture of plug and other tobaccos, this factory will enable producers to find a home market for their product. The capital employed in carrying on this manufactory is largely supplied by one of the oldest and most favorably-known dealers in tobacco in California, while the superintendency is in the hands of Mr. Witcher Jones, who has been all his life engaged in manufacturing tobacco in Virginia, where the excellence of his products are well known and acknowledged; thus guaranteeing the future excellence of the product of the Seal Rock Tobacco Company of California.

*Silver Medal.*

E. BRIGGS,  
W. B. RISING,  
ROBERT WALSH,  
W. T. WENZELL,  
J. WALCOM,

Committee.

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### CLASS XXXI.—CHEMICAL AND PHARMACEUTICAL PRODUCTS.

The Jury, to whom was referred Class 31, take pleasure in calling your special attention to the splendid exhibit of Paints, Oils, Mixed Paints, Varnishes, Artists' Materials, Glue, etc., exhibited by Messrs. Whittier, Fuller & Co. of this city. The artistic manner in which their exhibit is presented at once attracts the eye on entering the Pavilion, divided as it is into four departments, each separated by plate glass partitions, reflecting and re-reflecting the articles on exhibition, while revolving mirrors continually present new and attractive features to the beholder. The display of White Lead, of which they are the Pioneer and at present sole manufacturers on this coast, is entitled to more than a passing notice. The White Lead is made entirely from lead mined east of the Rocky Mountains. Its manufacture thus opens a market for the miners, smelters and freighters until it reaches the factory, where it affords employment to upwards of 100 men, at the same time opening a market to producers of flax from which the seed is obtained to supply the oil in which the lead is ground for use, also giving employment to lumbermen, coopers, etc., directly and indirectly giving employment and maintenance to a great number of people at remunerative wages. Their exhibit of colors ground in oil of every shade and hue are pure, and present a brilliant and attractive appearance as they stand side by side in one of the departments. These colors are put up in all sized packages from  $\frac{1}{2}$  a pound to 25 pounds, and are attractively labelled.

In still another department is an exhibit of their Pacific Rubber Paints, a liquid paint which is prepared for use and which can be applied by any one, making them convenient and desirable for those situated where painters are not easily obtained. These paints are all made of the best of materials that enter into the composition of the ordinary paints, as prepared by painters from lead, oil, etc., having great body and good covering properties.



Your Committee take pleasure in recommending the first premium and highest award to them for the best display of Paints, Oils, Glue and Painters' materials, of California manufacture.

*Gold Medal, Best Display of Paints, Cal. Manufacture.*

*Silver Medal, Mixed Paints, Ground in Oil and Colors.*

*Silver Medal for Pacific Rubber Paints Mixed for Use.*

*Silver Medal for California-made Glue.*

Hueter Bros. & Co.....Varnishes

This important branch of industry, as carried on by these gentlemen, is one that is entitled to a special premium, and we recommend the highest award. Your Committee have taken great pains to inform themselves in the premises, and from the evidence thus obtained we find that those who use varnishes of all kinds pronounce those produced by the Pioneer Varnish Manufactory of Hueter Bros. & Co. superior to the imported article, both in amount covered by a given quantity, as well as in durability. *Silver Medal.*

Henry Lake & Co .....Shoe Blacking

This was the best display of California-made Shoe Blacking.

*Silver Medal.*

T. J. Bass & Co.....Best assortment and display of Artists' Materials

*Silver Medal.*

Davis & Cooper..... Oil Blacking

*Diploma.*

Pacific Ink Factory.....Best display of Inks, Writing Fluid and Mucilage

*Silver Medal.*

Pacific Fertilizing Co .....Fertilizers

*Diploma.*

George C. Thompson.....Soda Water Generating Apparatus, California make

*Bronze Medal.*

Dixon Crucible Co.....Stove Polish, Axle Grease, Pencils and Lubricants

*Bronze Medal.*

George C. Thompson.....Best Soda Water Draught Apparatus

*Silver Medal.*

W. H. Rayburn .....Compressed Shavings for kindling fires

Meritorious.

*Diploma.*

Alfred H. Moore & Co.....Silicate Paint, prepared for general use

*Silver Medal.*

F. C. Keil..... Best assortment of Perfumery and Extracts

*Silver Medal.*

G. G. Burnett....Best general display of Chemical and Pharmaceutical Preparations.

*Silver Medal for best display of Chemical Preparations and Toilet Articles.*

Standard Soap Company.....Best display of Candles

*Silver Medal.*

Jos. N. Souther & Co.. Best display of Extracts and Essences, Cal. Production  
*Silver Medal.*

Giant Powder Company.....Giant Powder  
California Powder Company.....Hercules and Sporting Powder

Your Committee have had neither the time nor the opportunity of having such tests made of the relative merits of these Powders as would enable them to render a just and proper award. We therefore refer the whole matter to the Board of Managers for such action as may seem just and proper in the premises.

*Silver Medal to the California Powder Co. for Sporting Powder.*

Boericke & Shreck....Homœopathic Remedies and Works on Homœopathy

This is the only exhibit of this character and is entitled to such award as the Board may deem proper.  
*Diploma.*

Parisian Polish Co.....Furniture Polish  
*\*Diploma.*

A. F. Merriman & Son.....Dental Toilet Articles  
*\*Diploma.*

A large number of exhibits of Patent Medicines, Proprietary Articles, etc. referred to this Committee, are necessarily of so complicated a character; that, as a Jury, we do not feel justified in passing upon them. While some of these may possess real merit, others may contain elements positively injurious; and we think the exhibitors should have been content to use the space allotted for exhibition and advertising purposes without further claim upon your time or that of the Jurors.

W. T. Coleman & Co.....Royal Baking Powder

We recommend the highest award and premium to this Baking Powder for the purest and best on exhibition. After an analysis we find it a pure article and wholesome.  
*Silver Medal.*

Respectfully submitted,

E. BRIGGS,  
W. B. RISING,  
ROBERT WALSH,  
W. T. WENZELL,  
J. WALCOM,

Committee. •

\* By the Managers.

#### REPORT ON SOAPS.

Standard Soap Company.....Soaps  
Columbia Soap Works... ..Soaps

After a full and thorough examination of the different exhibits of Soaps, we recommend that the first premium be awarded to the Columbia Soap works for the best general exhibit of Soaps of California manufacture.

*Gold Medal.*

We also recommend to the Columbia Soap Works an award for the "best Toilet Soaps," and have no hesitation in pronouncing them to be fully equal, if not superior in material and perfume to any manufactured in the United States.

Respectfully submitted,

E. BRIGGS,  
ROBERT WALSH,  
W. T. WENZELL,  
J. WALCOM,  
Committee.

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CLASS XXXII.—GEOLOGY, MINERALOGY, ZOOLOGY, BOTANY, ETC.

- American Salt Co.....Manufactured and Rock Salt  
*Silver Medal.*
- Col. Warren.....Seeds, Historical Relics, Curios  
*Silver Medal.*
- Wm. Woodward.....Fine Display of Natural History Specimens, Stuffed  
Birds, etc.  
*Silver Medal.*
- I. L. Merrill.....Display of Asbestos Preparations  
*Bronze Medal.*
- H. D. Ranlett.....Display of Copper Ore from Calaveras County  
*Diploma.*
- Mrs. F. V. Hubbard.....Curios collected in Europe, Asia and Africa  
*Diploma.*

Respectfully submitted,

E. BRIGGS,  
W. B. RISING,  
ROBERT WALSH,  
W. T. WENZELL,  
J. WALCOM,  
Committee.

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CLASS XXXIII.—GROCERIES, MEATS, FLOUR, ETC.

Your Committee on Class 33 respectfully submit their report:

The Canned Vegetables exhibited by the Franco-California Packing Co. are of excellent quality, and are neatly and carefully packed. We recommend to them the highest award.  
*Gold Medal.*

The Mustard, Pickles and Sauce displayed by P. Wulff we find to be exceedingly palatable, and we recommend him an award.  
*Bronze Medal.*

The Crushed Indian offered by John T. Cutting & Co., upon experiment, we find it to be nutritious, wholesome and pleasant.  
*Diploma.*



The exhibit by Francis De Long, of Boiled and Sweet Cider, and Cider Vinegar, we find of excellent quality and free from all adulterations, and recommend an award. *Bronze Medal.*

Geo. Haas . . . . . Fine Confectionery and Candies  
For the excellence of this general display of Confectionery we recommend an award. *Silver Medal.*

Also for the quality and purity of his fine and fancy candies we recommend the award of *A Diploma.*

The Pop-Corn made and exhibited by D. S. Ciphers was being thoroughly tested and approved by numerous children, large and small, and appeared to give perfect satisfaction.

Frank Lambert . . . . . Preserved Food  
This process appears to have signally failed to preserve the few articles on exhibition.

The process exhibited by W. L. Dawson to preserve fruits without the addition of sugar depends upon some ingredient, the nature of which was not disclosed to your Committee; hence we prefer to make no comments.

There are two varieties of Egg Food, viz.: The Wellington and Imperial. Their composition was not made known to us, and not being able to take the necessary means and time to prove their various claims, we dismiss them with the statement that both have numerous testimonials to offer from various poultry raisers, and advise those who are interested to give them both a fair trial.

To B. F. Wellington, for his assortment of Seeds, Fresh Mushroom Spawn, and illustrated collection of Vegetables and Flowers, we recommend an award. *Diploma.*

Respectfully submitted,

WM. D. JOHNSTON, M. D.,

D. D. SHATTUCK,

PHILIP D. CODY,

Committee.

#### CLASS XXXIV.—WINES AND BRANDIES OF CALIFORNIA PRODUCTION, FROM CALIFORNIA VINEYARDS.

Your Judges, in Class 34, Wines and Brandies, have the honor to report upon the samples submitted to their judgment in compliance with printed instructions given them thereupon. There were few exhibitors in this class, one sample only being exhibited by Mr. Migeliavacca, and one, Blackberry Wine, by Mr. Hunt.

The Judges most respectfully recommend a high award to Arpad Haraszthy & Co, for Eclipse and other brands of Natural Champagnes, and also for their generally fine display of both Champagne and Still Wines, and such other awards as proper, according to the classification appended. The Judges recommend this award strongly and respectfully for the intrinsic merits of

those Champagne exhibits, as also, on account of the large capital sunk in the enterprise. The risk of loss or failure, and the heavy competition of the Effervescent Wines, whether natural or artificial, as also on the ground of the now assured success of a new and important branch of viticultural industry.

*Gold Medal for Eclipse and other brands of Champagne.*

*Diploma for Best Angelica Wine.*

To J. Gundlach & Co. we recommend your highest award for their display of Dry White and Red Wines of the Rhenish type, and also for their other Dry Red Wines, and the generally good display of their exhibits; we also recommend other awards and distinctions according to our classification.

*Gold Medal for best general display of California Wines.*

*Diploma for Best White Wine, Rhenish Type.*

*Diploma for Best Red Wines.*

W. J. Hunt.....Blackberry Wine

We recommend for this Wine a diploma of merit.

*Diploma.*

#### REPORT ON BRANDIES.

In this sub-section there were only two exhibitors.

We have the honor to report that six samples of California Brandy were submitted to us, viz: J. Gundlach & Co.'s Grape Brandy, distilled in 1878 and 1881 respectively, and A. Haraszthy & Co.'s, dated 1878, 1879, 1880 and 1881.

We have placed them, to the best of our judgment, in the following order of merit:

1st J. Gundlach & Co., 1881, alcohol 49.58; pale, a good deal of essential oil, but promising with time to ripen into good Brandy.

2d. J. Gundlach & Co., 1878, alcohol 46.27; deep color, rough taste.

No striking merit attaches to either sample.

{ 1st. A. Haraszthy & Co., 1880, alcohol 47.58; remarkably good, pale, no fusel oil.  
 { 2d. A. Haraszthy & Co., 1879, alcohol 49.95; uncolored, pure brandy.  
 { 3d. A. Haraszthy & Co., 1881, alcohol 48.53; very good, well-made, no fusel oil.

4th. A. Haraszthy & Co., 1878, alcohol 48.50; deficient in character, inferior.

Regarding the three bracketed together, we found so little difference in point of merit that we thought it best to recommend them collectively for a medal. We remark with pleasure a very great improvement in California Brandies distilled within the last two or three years, whilst we regret the apathy of the distillers and holders of native Brandies in neglecting to avail themselves of the opportunity to exhibit their best for the study of experts and the information of the public.

*Diploma to A. Haraszthy & Co. for Best California Brandy.*

JOHN I. BLEASDALE, D. D., Chairman,  
 ALEXANDER D. BELL,  
 F. PHONDORF, Jurors.

CLASS XXXV.—FERMENTED PRODUCTS.

The Jurors in Class 35 have the honor to report on exhibits submitted to their judgment, as follows:

J. H. Burnell & Bro... Albion Ale and Porter

The Ale exhibited by this firm was a very good type of first-class English Ale, and taking into account the success achieved, the capital invested, and the risk of failure incurred, we cordially recommend it.

The Porter we consider the best sample on exhibition, and recommend it for favorable consideration. *Silver Medal for Albion Ale.*

J. T. Cutting & Co... Falk's Milwaukee Beer

This is undoubtedly the best sample, and we recommend a first premium for general excellence. *Diploma.*

W. J. Hunt... Blackberry Cordial

We recommend this for general excellence. *Diploma.*

Wilmerding & Co... Peruvian Stomach Bitters

Of these we make favorable mention for their general excellence. *Diploma.*

Arpad Haraszthy & Co... I. X. L. Bitters

Of these we make favorable mention.

J. T. Cutting & Co... Lithurian Stomach Bitters

This exhibit of Imported Bitters, in our estimation, merits the highest premium for general excellence in its class as a "Cocktail Bitter."

Wm. Goepert & Son... Exported Felsen Beer *Diploma.*

Respectfully submitted.

I. D. THOMPSON,  
MICHAEL KANE,  
JOHN HARRISON,  
C. COATES,  
Committee.

CLASS XXXVI.—PRINTING, LITHOGRAPHING, ETC.

Your Committee on Class 36 would report:

Sumner, Whitney & Co... Law Books and Revolving Book-Cases

The exhibit of this firm consisted of their own publications only. The Reports of the Supreme Court of California, in fifty-seven volumes, and a row of national works, treatises on various branches of the law, which have already gained a wide reputation and circulation, some of which have been reprinted and sold throughout the Union. Beside these solid octavo volumes, and in strong contrast with the old folio and black letter books of olden times, was a line of little books just large enough for the hand or pocket, known as "The Practitioner's Series." Each of these has condensed the learning concerning some great title of the law into short paragraphs and terse sentences,



supported by an enormous number of references to cases from both English and American Reports. Some of these on prominent titles have reached second, third, and fifth editions. California has been the first American State to reduce the Common (or unwritten) Law to a statutory system by enacting a series of Codes. We have a Civil Code, covering the rights of persons and property; a Code of Civil Procedure, providing the methods by which those rights may be enforced in our Courts; a Penal Code, defining crimes and providing for the punishment thereof; and a Political Code which provides for the Government of the State and the duties of its officers. These four Codes and the Constitution fully annotated are published by Messrs. Whitney & Co. in five neat handy volumes, and are to be found on the tables of three-fourths of the lawyers of the State. This exhibit also embraces half a dozen books, entitled "Legal Recreations," which treat of sober legal topics such as Wills, the Law of Carriers, of Host and Guest, etc., which, while reliable and useful as law books, are as entertaining to the general reader as much of the light literature of the day.

These works are exhibited in neat revolving Book Cases of Eastern manufacture, and show that California has contributed its proportion to the legal literature of the country, and that the brain-workers of the East are ready to purchase and use these literary tools of California manufacture.

We recommend an award.

*Silver Medal.*

Mrs. J. W. Stow.....Works of Sisters of Social Science; Samples of Wood and Metal Type, and Printers' Implements; Copies of Newspapers, etc.

George Spaulding & Co.....Daily Paper and Book and Job Printing

The *Mechanics' Fair Daily* has been published daily in the Pavilion during the Fair. The paper has each day contained a good description of articles on exhibition and much pleasant reading matter, incidents of the Fair, programmes of the music and items of news. The daily paper has become so important an adjunct to the Annual Exhibitions in the Pavilion, that visitors each year look for an improvement on the preceding one, and, in the opinion of nearly all visitors, the *Mechanics' Fair Daily* this year has been fully equal to, if not better than any previous paper of the Fair.

The exhibit of specimens of Book and Job Printing by this firm has been the best of the year. The Catalogues of Hardware have been produced in the very best style of the art, in letter-press, style, paper and inks. They also show some beautiful specimens of illuminated cards and pamphlet covers.

We recommend an award.

*Bronze Medal.*

Edward Bosqui & Co.....Lithography—The Grapes and Grape Vines of California.

The exhibit of this firm comprises lithographic plates containing prints of eight kinds of California Grapes. These pictures have been closely inspected by thousands of persons interested in viticulture and the lovers and critics of art, and all agree in the opinion that they are a most perfect imitation of the grape and vine. The ordinary observer of these grand and costly works can

have but a limited conception of the labor, time and money applied to their production. Mr. Bosqui has expended thousands of dollars and more than a year's time in bringing to completion his great work on "the Grapes and Grape Vines of California." After returning from the Paris Exposition, Prof. Geo. Davidson writes to Mr. Bosqui congratulations on his great success, and says: "You know I was fairly enthusiastic about those I had received, the process I had witnessed, etc., but now I come back fairly and squarely declaring that I saw nothing of the class in Europe to approach them. How chagrined I was in the Exposition at Paris to find you had nothing of the kind on exhibition! For it would not only have vastly redounded to your credit, taste and enterprise, but would have shown the viticulturists of Europe what California was producing and what you were so magnificently illustrating \* \* The jurors gave gold medals for objects much below your efforts; in fact, your illustrations would have been unique in this last World's Collection. The only drawback would have been that the United States Commissioner would have been required to prove that your plates represented our ordinary productions, and especially that you, as an individual, and not the State, had undertaken the work."

We recommend an award.

*Silver Medal.*

Colonel Warren....Collections of Agricultural, Horticultural and Floral Books, in variety. The Eucalyptus woods and seeds of many kinds. Flower and Vegetable seeds and Eucalyptus Medical Preparations from Australia.

The Colonel has a great many ancient books and newspapers; the first sack of flour made on this coast in 1853; the first broom made in 1852; a number of the first agricultural products; mountain flower-seeds, vegetable seeds of '52 and '53; cherries and gooseberries of '56 in brandy; samples of Eucalyptus wood of ten kinds. Col. Warren's memory of the early times is retentive, and he loses no opportunity of entertaining visitors to his stand, particularly on the medical properties of the Eucalyptus. He has published the *California Farmer* since 1852, which he has continuously edited and printed for more than thirty years. We recommend to Col. Warren an award.

*Silver Medal. (See Class XXXII.)*

Respectfully submitted,

B. F. STERETT,  
CHARLES L. SCUDDER.

### CLASS XXXVII.—GOLD, SILVER AND PLATED WARE, WATCHES, CLOCKS, JEWELRY, BRONZES, ETC.

Your Committee of award on articles embraced in Class 37 beg leave to submit the following report:

Entry 89 is that of R. W. Jackson, comprising shell-work in jewelry, and inlaid ornamental work in shell. The exhibit is the most worthy specimen of "Home Industry" to be found on exhibition, and but few



have any conception of the extent and amount of business done by this exhibitor. Deeming it worthy of attention, we visited the factory and found it employed from 15 to 20 men in working up the "Haliotus," or what is commonly known as the "Abalone" shell. These shells are purchased from Italian and Chinese fishermen, and the entire work from the rough shell to its completion, as shown in the exhibit, is done by this exhibitor, who originated shell-work here. Such work is done in no other part of the world, principally because this shell is to be found only on this coast. The machinery used in its manufacture is of his own invention. In consideration of the enterprising spirit of this exhibitor, we recommend to him the highest award, as a fitting tribute to his industry, and the perfection to which he has brought his work.

*Silver Medal.*

Dichera, Michel & Co ..... Display of Oriental Curiosities

This lot of Curios was evidently placed on exhibition for sale; but in consideration of the fact that they were recognized with a premium by Fairs in Australia, we deem it justice to the Society to place itself on record, and not be outdone by foreign countries, and therefore recommend an award.

W. E. Shepman ..... Silver Plated Ware and Amalgamating Plates

E. G. Denniston ..... Silver Plated Ware and Plated Mining Plates

As between these two exhibits it is difficult to distinguish; but in consideration of the fact that the latter has already four medals of the Society, we thought proper to recommend the award for Plated Ware to the former.

*Silver Medal to E. G. Denniston for Plated Amalgamating Plates.*

*Silver Medal to W. E. Shepman for Plated Ware.*

The remaining exhibits are those of Ichi Ban and G. T. Marsh & Co., both representing Japanese and Oriental goods. These exhibits differ materially in their characters and arrangements.

In that of G. T. Marsh & Co. are some fine pieces of Bronze, Porcelain, Lacquer Work, Carvings, Embroideries in Gold Thread, etc. A small but creditable display, and some fine goods.

That of Ichi Ban is a large and more varied display. At first glance, one would hardly think there were many fine goods, the space occupied by them being so large; but a studied search develops a great number of very fine goods in Bronzes, Imari, Cloissonneu and Lacquer, Wood and Ivory Carvings, Inlaid Work, Embroidered Screens, (some of the letters in very fine work,) Decorated Earthenware, Jewelry, Embroideries, both varied and expensive, in silk, satin and gold; also a number of cases of fine goods and articles; one especially worthy of attention contains an extraordinary collection of Japanese Coins, some dating back over 2,000 years. A leading feature of this exhibition is, the presentation to the visitor of the work in progress of Japanese Artists in embroidery and painting, in the center of the room, and cannot be too highly commended. This exhibition is not only the largest in wares, but is, in itself, both novel and interesting, and a valuable acquisition to the Society, showing much enterprise in its display and accessions, and deserves the greatest encouragement.



Both exhibits in this line are of a high order; but as you recommend a recognition of the largest and best exhibit we are obliged to accord to the Ichi Ban the preference, and therefore recommend to it a premium, such as is deemed a fitting recognition of the general enterprise shown in this exhibit, and as an encouragement to future exhibitions.

*Gold Medal.*

We would also recommend a proper testimonial to Messrs. G. T. Marsh & Co. for their exhibits of Bronze and Porcelain Ware.

*Silver Medal.*

Mrs. A. O. Cook ..... Hair Jewelry  
..... Bronze Medal.

CHAS. L. SCUDDER,  
F. H. McCONNELL,  
Committee.

CLASS XXXVIII.—SCIENTIFIC APPARATUS.

At the commencement of the fair, a Committee consisting of F. A. Frank, W. J. Waters and J. P. McMurray were appointed to examine goods in this class.

Among the various exhibits were three incubators, the Oxford, Eclipse and Perfect Hatcher, and exhibited respectfully by J. P. Clark, G. G. Wickson and B. F. Wellington.

The Committee, after a number of meetings and careful examination, were unable to agree upon a verdict, each machine having an advocate for its superiority. They reported to the Board that they were unable to agree, and Wm. Hammond, M. D., was requested to act with them. The final result was, that Mr. Hammond and Mr. Waters recommended an award to the Oxford Incubator, each presenting in writing a comprehensive report of the working and merits of the machine. Messrs. Frank and McMurray also presented a report recommending the Eclipse machine for an award. After consideration, the Board of Managers decided to make no award to Incubators.

We the jurors in Class 38 beg leave to make the following report:  
Central Gas Light Company... Gas Engine, Gas Stoves for Cooking and Heating, Gas Apparatus, etc.

*Gold Medal.*

W. B. West ..... Optical Goods  
..... Bronze Medal.

V. S. W. Parkhurst..... Forsyth's Scales  
..... Silver Medal.

John Roach..... Surveying Instruments  
..... Silver Medal.

J. H. W. Riley.....Calligraph  
Diploma.

H. Wenzel.....Pneumatic Clock  
Silver Medal.

F. A. FRANK,  
W. J. WATERS,  
J. P. McMURRAY,  
Committee.

### CLASS XXXIX.—SURGICAL AND DENTAL INSTRUMENTS AND APPLIANCES.

We, the undersigned Jurors, appointed to report upon Medical, Surgical and Dental Apparatus in Class 39, having carefully examined the various exhibits presented, report as follows:

Drs. Hinkle & Handy.....Apparatus for the Cure of Deformities

The apparatus consists of appliances for various deformities of the back, hip, legs, etc., such as are and have been for years in common use by surgeons. We recognize no new principle involved or new application of old principles, and presume no claim of this kind is made. The apparatus is handsomely and tastefully constructed and presents a good appearance: but we see nothing which in our judgment calls for an award.

*Bronze Medal.*

Mr. C. N. West....“A New Electro-Medical Belt for the Cure of all Diseases  
without Medicine.”

Aside from the extravagant assertion in this announcement, Mr. West claims for his Belt that the positive element, the zinc, when worn out, may be removed and replaced at trivial cost, thus making the Belt practically indestructible. We make no comment upon the *broad* assertion that the Belt will cure, among many other diseases named in his circular, Bright's Disease, Rupture, Heart Disease, Erysipelas, Epilepsy, Asthma, Blood-poisoning, etc. While we do not endorse the Belt as a universal remedy, we believe it a good one, well constructed and durable, and by actual trial we find it capable of generating a large amount of electricity. It is, no doubt, of value in the treatment of that class of cases in which electricity *in this form* is serviceable.

*Diploma.*

Two exhibits of Trusses for Hernia were examined by the Jury.

Wm. Beeman.....Elastic Cork Truss

A. A. McLean.....I. X. L. Elastic Truss

The points of difference between these Trusses are the pads and their mode of attachment to the elastic bands. The pad of the former is made of cork and is attached by a spiral spring which permits of some lateral and perpendicular motion. The pad of the I. X. L. Truss is of hard wood, polished, and is attached by a ball and socket or universal joint, and has a spring at the back of the ball to increase the elasticity. Each of these Trusses is good in

its way. The cork pad, being slightly elastic, may be applicable to cases in which retention mainly is desired, or in which tenderness will not permit a hard pad to be worn, while the latter, having the hard wood pad, seems more suitable where a radical cure is aimed at. We believe the I. X. L. Elastic Truss to be serviceable in the larger proportion of cases, but as both have merit the Jury would suggest that an award be granted each.

*Bronze Medal to A. A. McLean for Best Truss, I. X. L. Elastic.*

*Diploma to Wm. Beeman for Elastic Cork Truss.*

Wm. Beeman.....Artificial Limbs  
*Silver Medal.*

(The last not reported upon by the Committee.)

Respectfully submitted,

R. BEVERLY COLE, M. D.

HENRY GIBBONS, JR., M. D.,  
Committee.

## CLASS XL.—HAIR WORK, NEEDLEWORK, EMBROIDERY, SHELL WORK, PATTERNS, ETC.

Your Committee on Class 40, after a long and careful examination of articles, would respectfully recommend the following as worthy of an award:

Mrs. N. R. Fox.....Embroidery Pictures  
These were very pretty, and showed taste and skill in their execution.

*Diploma.*

Mrs. N. P. McPherson.....Picture of Yosemite Valley made of Ferns, and  
the Falls made of Rock.

These pictures show to what ornamental purposes the plainest of Nature's forms may be utilized.

*Diploma.*

Mrs. E. H. Hubbard.....Human Hair Goods  
This was a fine display of Wigs, Curls, Braids and other articles, and worthy of special mention.

*Bronze Medal.*

Mrs. A. O. Cook.....Case of Hair Jewelry and Preserved Flowers  
In the manufacture of Jewelry and other articles of Human Hair, Mrs. Cook shows rare skill, and we recommend an award.

*Bronze Medal.*

Miss May Favor.....Fancy Needlework  
Very pretty and deserving an award.

*Diploma.*

Mrs. C. A. Johnson ... Hand-knit Quilt  
*Diploma.*

Mrs. Agnes Bowman.....Hand-made Floor Mats  
This old lady is now 82 years of age, and takes great pleasure in making something each year for the Fair.

*Diploma.*

Mrs. C. Baker.....Wax and Tarlton Flowers and Autumn Leaves  
This was a fine display and deserving an award.

*Diploma.*



- Emma J. Cook..... Vase of Wax Flowers  
*Diploma.*
- L. P. Federmeyer ..... Hair Work  
This exhibitor shows wonderful skill in making life-like pictures and portraits of Human Hair, and deserves an award, which is well merited.  
*Bronze Medal.*
- Mrs. Sarah Clark..... Tapestry Pictures  
*Diploma.*
- Mrs. Theresa Frulghi..... Crocheted Bed Quilt  
*Diploma.*
- Miss Bessie Taylor..... Lace-embroidered Toilet Set  
*Diploma.*
- Miss Lizzie Easton..... Point Lace Work  
*Diploma.*
- Mrs. E. F. Jones..... Bed Spread and Pillow Shams  
*Diploma.*
- Miss M. A. Oakshett ..... Rugs and Ottomans  
These were deserving of special mention.  
*Diploma.*
- Mrs. Howard Fraser..... Fancy Rug  
*Diploma.*
- Misses E. L. & M. A. Dietz..... Original Floral Sign  
*Diploma.*
- Mrs. Judith McGowan..... Sofa Cushion, Satchets and Fancy Work  
*Diploma.*
- Mrs. Henrietta Lush... .. Bed Spread, Table Cover and Tidies  
*Diploma.*
- Mrs. Eliza Prydz..... Embroidered Rug and Towel  
*Diploma.*
- Mrs. A. N. Peterson.... Hade-made Lace Work, including Bed Spreads,  
Shawls, Tidies, Curtains, etc.  
*Bronze Medal.*
- Mrs. M. A. Gardiner..... Silk Quilt (Jacob's Vision)  
*Diploma.*
- Mrs. H. Phillips..... Embroidered Quilt, Skirt and Cushion  
*Diploma.*
- Mrs. J. E. Cotter..... Autumn Leaves and Flowers  
*Diploma.*
- Miss Hattie L. Work.... Silk Quilt of 6,000 pieces and Satin Cushion 700 pieces  
*Diploma.*
- Mrs. H. Stettin..... General display of Embroidery  
*Bronze Medal for Gold and Silk Embroidery.*  
*Diploma for Linen Embroidery.*

- Mrs. Amanda Dallas ..... Wreath of Immortelles  
 The most remarkable part of this exhibit was its great size. *Diploma.*
- Mrs. J. Durand ..... Holbein Embroidery  
*Diploma.*
- Mrs. H. H. Parent ..... Miniature Furniture and Fancy Work  
*Diploma.*
- Great Unknown ..... Silk Table Cover  
 Very pretty and deserving of mention. *Diploma.*
- Mrs. M. S. Statham .... Tissue Paper Work  
*Diploma.*
- Mrs. C. Seivers ..... Crochet Tidies, Hair and Tarlton Flowers  
*Diploma for Tidies.*
- Mary E. Allen (aged 7) .. Lace Shams, Quilt and Doll's Clothes  
*Diploma.*
- Kitty S. Bryant ..... Worsted Bureau Set and Crocheted Shawl  
*Diploma.*
- Mrs. B. Browne ..... Fancy Quilt and Fire Screen  
*Diploma.*
- Mary M. Cherry ..... Worsted Wreath  
*Diploma.*
- Mrs. E. A. Bulfinch ..... Silk and Patch-work Quilt  
*Diploma.*
- Miss P. Gosliner ..... Pillow Shams  
*Diploma.*
- Mrs. S. W. Raveley ..... Bed Quilt  
*Diploma.*
- Mrs. P. E. Kramer .... Embroidered Banners, Brackets, Picture Frames,  
 Piano Cover, etc.  
 This was a very elegant and beautiful display, and we recommend the  
 highest award. *Silver Medal for Best Kensington Embroidery.*  
*Diploma for Cheneille Work.*
- Mrs. J. Morse ..... Linen Embroidery, Table Cover, etc.  
*Diploma.*
- Mrs. M. I. Elder ..... General Display of Embroidery  
*Diploma for Portiere Curtain.*
- Mrs. Julianna Luger ..... Skeleton Leaves and Flowers  
*Diploma.*
- Harriet F. Baily ..... Paper Sculpture  
 This talented lady gave a daily exhibition of her skill by cutting with ordin-  
 ary scissors, from paper, a great variety of flowers and other beautiful objects.  
*Diploma.*
- Henry R. Reynolds ..... Skeleton Leaf Pictures  
*Diploma.*

Respectfully submitted,

MRS. GEORGE SPAULDING,

MRS. J. H. GILMORE,

MRS. ASA R. WELLS, Committee.

CLASS XLI. AND XLII.—PAINTINGS IN OIL AND WATER COLORS.  
CERAMIC ART.

Your Committee of Awards on Classes 41 and 42, beg leave to submit the following report:

The Society has placed at the disposal of this Committee one thousand dollars to be awarded to exhibitors under these classes.

In our opinion the artists have not responded in a manner or degree commensurate with the liberality of the Society. We were instructed to make quantity as well as quality a factor in the distribution of prizes, a very difficult thing to do. We have endeavored to recognize the true artist.

In accordance with your instructions, we have been liberal, and disbursed the entire amount, doing more than justice to some exhibitors. Where marked improvement has been shown we have rewarded it with a liberal premium. To Amateurs we have shown as strong recognition as possible. Your offer of premiums is intended to encourage and improve Art, and where any talent has been shown we have endeavored to recognize it. The figures and sketches in pencil by pupils of the School of Design are worthy of more than honorable mention.

Every exhibit worthy of notice has been rewarded, and, if we have been over liberal in any one instance, we hope those who cannot fail to appreciate the fact will endeavor to show improvement in the future. In no department has the Society shown more liberality than in this, and we think it but poorly responded to by our local artists.

*One thousand dollars in Cash awarded for Exhibits in this Class. (See Cash Premiums.)*

In Class 42 we recommend to

W. W. Montague & Co.....	Richest and best Display of Encaustic Tiles
	<i>Gold Medal.</i>
Mrs. Helen Brodt.....	Porcelain Painting
	<i>Silver Medal.</i>
Miss A. Hassler.....	Porcelain Painting
	<i>Bronze Medal.</i>

Respectfully submitted,

T. J. BLAKENEY,  
CHAS. L. SCUDDER,  
NELLIE HOPPS  
MRS. O. F. WILLEY,  
NELLY A. WATERHOUSE,  
Committee.

CLASS XLIII.—SCULPTURE, STATUARY AND CARVING.

Your Committee on Class 44 find the experience of past years repeated, namely, a poor and meagre exhibition in Statuary, Engraving, etc.

B. C. Crundel..... Ivory Goods, Canes, etc.  
Makes a generally creditable display, and worthy, we think, of an award.  
8 *Bronze Medal.*



- S. & G. Gump.....Display of Statuettes, Terra Cotta Ornaments, etc.  
This exhibit deserves honorable mention.
- Henry Gressli.....Two pieces of Sculpture and two Models  
*Silver Medal.*
- Geo. Brewer..... Bust of Neilson  
Not for Competition.
- Mme. C. Delabare...Two Wax Models, five Statuettes, Cigar Stand and Paper  
Weight. *Diploma.*
- Henry Cousins.....Renaissance Portrait Frame  
A very meritorious piece of carving, and fully deserving an award.  
*Bronze Medal.*

J. F. REY,  
JAMES K. WILSON,  
E. McD. JOHNSTONE,  
Committee.

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CLASS XLIV.—ENGRAVINGS, ORIGINAL DRAWINGS, PENMANSHIP,  
ETC.

Your Committee on Class 44 would respectfully submit the following:

Carl Eisenschimmel.....Best General Display of Penmanship and Drawing

We unanimously award the highest place in this class, and would recommend diplomas to the following of his pupils:

- Miss Lulu Bauer.....Map Drawing
- S. G. Jordan.....Illuminated Lettering
- H. Barkhans.....Pen Drawing
- Bertha Christian.....Pen Drawing
- A. M. Easton.....Pen Drawing
- Rose Oppenheimer.....Business Penmanship
- Alfred Lipman.....Business Penmanship
- Louis Lang.....Business Penmanship
- W. S. Coleman.....Penmanship  
*Silver Medal and Diplomas awarded as recommended.*

E. A. Godart..... Pen Drawing and Card Writing  
Of a creditable character.

Messrs. Sanborn, Vail & Co.....Pictures  
This is a very attractive display.

*Silver Medal.*

W. H. Smyth.....Mechanical Drawings  
*Diploma.*

M. B. Dodge.....Machine Drawings  
*Honorable Mention.*

Mrs. N. H. Moore.....Crayon Drawings

Mrs. M. Warburton.....Crayon Picture  
*Creditable Effort.*

- Mrs. B. F. Ingalls..... Six Medley Pictures  
Remarkably ingenious, and clever in detail, and deserving a  
*Diploma.*
- Espina's Writing Academy..... 30 Specimens of Pen Drawing  
This exhibit we consider the second best display of Pen Drawing, and  
recommend the award in such case.
- Heald's Business College..... Specimens of Penwork  
We recommend the highest award in this case for General Penmanship.  
*Diploma.*
- California Commercial College ..... Pen Work  
This display is very noticeable for Pen Flourishing.  
*Diploma.*
- S. & G. Gump..... Steel Engravings  
*Diploma.*
- Col. Warren..... Pictures and Engravings
- Prof. H. Fletcher. .... Crayon Drawings
- Leszynsky's Business College..... Business Forms  
We would recommend an award.  
*Diploma.*
- Herman Cohen..... Picture, "Guardian Angel."  
Not for Competition.

A portion of your Committee having been favored with a glimpse of this wonderful work, do unhesitatingly pronounce it the most remarkable piece of still-life they have ever gazed upon.

- E. McD. Johnstone..... Drawings in Pen and Ink  
Few persons would mistake these Drawings for Steel Engravings.
- H. R. Reynolds..... Pen and Ink Picture  
Honorable Mention.
- Pupils of School of Design..... Sketches in Crayon, Pencil and Ink

Your Committee would call the attention of your Honorable Board to the fact, that, for this display, which in intrinsic merit, is far superior to any we have examined; there is not a gold medal for general display, and medals of value for particular designs and studies.

The principal reason prompting us in urging the attention of your Honorable Board to the greater encouragement of these scholars, is the fact that, with a few exceptions, the exhibits we have examined are simply copies; and lack of originality, or any approach to create art or design, points of great importance in, and characteristic of the numbers in this display.

*Silver Medal.*

- Night School, S. F. School Department.... Original Drawings by the Pupils.  
*Silver Medal.*

J. J. REY,  
JAMES K. WILSON,  
E. McD. JOHNSTONE.  
Committee

CLASS XLV.—PHOTOGRAPHY.

- Your Committee on Class 45 beg to report as follows:  
We regret a lack of general display in this department, many indeed of our prominent galleries not being represented in any shape:
- N. M. Klain.....Photographic Views  
This we find to be the largest, and, upon the whole, the most meritorious display on exhibition.  
*Silver Medal for best display.*  
*Bronze Medal for Stereoscopic Views.*
- Smyth & Watson.....Photographs of Machinery  
Uniformly good.
- Wm. Shew.....Photographs Retouched  
Not for Competition.
- O. V. Lange.....Photographic Views  
Second best general display.
- H. B. Patrick & Co.....Photo Baskets, Fans, etc.  
Possesses some small degree of merit.
- J. B. Kirkland.....Landscape Photography  
Of landscape photography, Mr. Kirkland has shown two large views of Pennsylvania scenery, the one of Susquehanna river being very excellent and deserving of an award.  
*Diploma.*
- Elite Photo Gallery.....Photographs  
Too late for Competition.

Respectfully submitted,  
J. J. REY,  
JAMES K. WILSON,  
E. McD. JOHNSTONE.

CLASSES XLVI. AND XLVII.—PLANTS, TREES, FLOWERS AND FRUIT.

We, the undersigned, your Committee on Class 46 and 47, including plants, flowers and fruits, beg leave to report as follows:

FLOWERS.

- We find the displays in this department generally creditable to the exhibitors, and we have experienced considerable difficulty in deciding between some of the exhibits presented for our consideration. After due consideration we have, however, decided to award the premiums as follows:
- E. Meyer.....Best Continuous Display of Foliage, Plants and Ferns  
\$120.00 and *Silver Medal.*
- Woodward's Gardens.....Second best display of Foliage, Plants and Ferns  
\$80.00 and *Bronze Medal.*
- John Pouyal.....Third best display of Foliage, Plants and Ferns  
\$50.00



J. T. Murphy .....	Best Continuous display of Cut Flowers \$40.00 and Silver Medal.
Thos. Saywell.....	Second best display of Cut Flowers \$25.00 and Bronze Medal.
Thos. Saywell....	Best display of Dahlias \$15.00

FRUIT.

Sol. Runyan.....	Best continuous general display of Fruit \$75.00 and Silver Medal.
John Pouyal .....	Best Group of Orange and Lemon Trees Silver Medal.

We find that other fruit exhibits did not come within the proper requirements of a continuous display and we consequently refrain from awarding the other premiums. As a fitting acknowledgment of the worthiness of the following entries, we respectfully suggest that a diploma be issued to each:

Mrs. M. C. McLellan.....	Prolific Pear Graft
G. W. Hinclay.....	Mountain Peaches
Munson & Greavies.....	Tuscan Wheat
Eveleth & Nash.....	Exhibition of Fruit
L. H. Thomas.....	Watermelon
A. Crawford.....	Gravenstein Apples
Eldorado Fruit Company.....	Mountain Peaches
W. J. Hunt.....	Apples and Peaches

*Diplomas awarded as recommended.*

All of which is respectfully submitted,

AMOS ADAMS,  
MATTIE A. FARNUM,  
S. JENNIE MANN,  
E. J. WICKSON,  
Committee.

# CLASSIFIED LIST

OF

# PREMIUMS      AWARDED.

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## GOLD MEDALS.

Class.	Name of Exhibitor.	Article.
2.	W. T. Garratt .	Best Steam Pump, direct and double acting (Hookers)
3.	San Francisco Tool Company.....	Best Display of Metal Working Machinery
4.	Pacific Saw Manufacturing Co . . . . .	Best General Display of Saws
11.	D. M. Osborne & Co ..	Best General Display of Agricultural Machinery
12.	California Iron Company.....	Best General Display of Iron and Steel (California Manufacture)
12.	Selby Smelting and Lead Co.... .	Best General Display of Lead and its Manufactures
12.	California Wire Works.....	Best Display of Wire and Wire Rope
13.	Pacific Stove and Iron Works.... .	Best Display of Stoves and Ranges (California Manufacture)
16.	Will & Finck.....	Best Display of Cutlery (California Manufacture)
18.	Weed & Kingwell... .	Best Assortment of Brass Work
18.	Emile Boesch..	Best General Display of Lamps, Lanterns and Reflectors
19.	Whittier, Fuller & Co.....	Best Plate Glass Mirror made in California
19.	John Mallon....	Best General Display of Glass for Architectural Work
20.	Statham Piano Company..... .	Best Display of Pianos (California Manufacture)
21.	M. J. McCue.....	Best General Display of Carriages (California Make)
22.	West Coast Furniture Co . . . . .	Best General Display of Furniture
23.	The J. M. Brunswick & Balke Co.....	Best General Display of Billiard Tables; Style and Finish
23.	P. Liesenfeld.....	Best Billiard Table (California Manufacture)
24.	Mattullath Manufacturing Co.....	Best Display of Cooperage
25.	Main & Winchester:...	Best General Display of Harness and Saddlery
26.	Tubbs & Co.....	Best General Display of Cordage
31.	Columbia Soap Works.....	Best Display and Assortment of Soaps
31.	Whittier, Fuller & Co.....	Best Display of White Lead and Paints (California Manufacture)

Class.	Name of Exhibitor.	Article.
33.	Franco-Californian Packing Co. . .	Best Display and Quality of Canned Vegetables
34.	J. Gundlach & Co. . . . .	Best General Display of California Wines
34.	Arpad Haraszthy & Co. . . . .	Eclipse and other brands of Native Champagnes
37.	Ichi Ban . . . . .	Best General Exhibit of Japanese Goods
38.	Central Gas Light Co. . . . .	General Display of Gas Stoves and Apparatus
42.	W. W. Montague & Co. . . . .	Encaustic English Art-Painted, and Chelsea American Tiles

## SILVER MEDALS.

1. Hawley Bros. Hardware Co. . . . . Best Straw-Burning Engine, "Rice's"
1. W. H. Ohmen . . . . . Best Vertical Engine and Boiler Combined, in motion
1. W. H. Ohmen . . . . . Best Upright Engine, in motion
1. P. H. Jackson & Co. . . . . Best Smoke Consumer
2. A. B. Sanford . . . . . Pulsometer Pump
2. Henry C. Langrehr . . . . . Best Ship Pump
2. W. T. Garratt . . . . . Deep Well Pump, with Toothaker's Air Cushion
2. Clott & Meese . . . . . Fly-Wheel Pump for Deep Wells
2. J. H. Darrah . . . . . Rotary Pump (California Invention)
2. W. F. Toothaker . . . . . Pneumatic Counter Balance for Pump Rods
3. W. A. Williams . . . . . Soldering Machine
3. Abner Doble . . . . . Blacksmiths', Miners' and Stone-Cutters' Tools
3. J. B. Jardine . . . . . Power Shears and Punching Machines
4. Geo. Bull & Co. . . . . Best Portable Saw-Mill, in motion
4. Smyth & Watson . . . . . Tree Feller and Log Saw (Smyth's Patent)
4. N. W. Spaulding . . . . . Circular Saw with Inserted Teeth
5. B. E. Henriksen . . . . . Best Automatic Safety Clutch for Elevators
5. S. F. Chronicle . . . . . Stereotype Plates and Work
5. F. W. Krogh & Co. . . . . Best Wind Mill (Cal. Manufacture)
5. Woolhouse Bros. . . . . Sunlight Gas Machine, in operation
5. Phelps, Foster & Co. . . . . Carpet Renovator (Couch's Patent)
6. M. B. Dodge . . . . . Best Ore Breaker
6. W. T. Garratt . . . . . Best Rock Drill
6. W. T. Garratt . . . . . Best Air Compressor
6. A. R. Redstone . . . . . Best Quartz Mill
6. F. A. Huntington . . . . . Best Crushing and Amalgamating Pan
6. Triumph Concentrating Co. . . . . Best Wet Concentrator
6. W. I. Tustin . . . . . Best Dry Crushing Quartz Mill
6. W. B. Farwell . . . . . Best Dry Concentrator
8. David Kerr . . . . . Best Hose Cart



Class.	Name of Exhibitor.	Article.
9.	Capt. George Cumming.....	Model of a Ship
10.	Alex Mackey.....	Carpet Loom, in operation
10.	A. A. Fisher.....	Display of Sewing Machines "The American
11.	D. M. Osborne & Co.....	Best Reaper with Self-Raker
11.	D. M. Osborne & Co.....	Best Self-Binding Grain Harvester
11.	Judson Manufacturing Co.....	Best Mower, "The Victor"
11.	Hawley Bros. Hardware Co.....	Best Gang Plow, "Buckeye"
11.	W. F. West.....	Best Portable Mill for Grinding Grain
11.	Byron Jackson.....	Best Derrick Hoist Fork
12.	Occidental Foundry.....	Best Assortment of Iron Castings
12.	Betts' Spring Company.....	Best Car and Carriage Springs (California Manufacture)
13.	Perry & Co.....	Best General Display of Stoves and Ranges
13.	W. W. Montague & Co.....	Best Fireplace Heater
14.	Liddle & Kaeding.....	Best Display and Assortment of Fire-Arms
16.	Will & Finck.....	Best Carving Set (California Make)
16.	Pacific Saw Manufacturing Co.....	Best Assortment of Edge Tools
17.	W. W. Montague & Co.....	Best Display of Marbleized Iron Mantels
17.	John B. Owens.....	Best Assortment of Terra Cotta Ware (Cal. Make)
17.	Gladding, McBean & Co.....	Best Sewer and Drain Pipe
18.	W. T. Garratt.....	Best Assortment of Bells
18.	J. A. Griswold.....	Griswold's Patent Lamp Filler
18.	P. H. Jackson & Co.....	Jackson's Patent Vault Cover and Patent Girder
18.	C. H. & G. W. Burr.....	Best Slop Hopper
18.	W. M. Sack.....	Best Water Closet, "Sack's Automatic"
18.	J. T. Titus.....	Best Sewer Trap
18.	T. Ambrun.....	Model of a Castle, made of Zinc
19.	John Mallon.....	Cut and Embossed Glass
19.	S. & G. Gump.....	Best Mirror Frames, Design and Workmanship
20.	Hallett, Davis & Co.....	Best General Display of Imported Pianos
20.	William West.....	Best Banjo (California make)
20.	Brandenstein & Seibold.....	Zithers of California Manufacture
21.	O. F. Willey & Co.....	Best General Display of Imported Carriages
21.	M. Kitzmuller.....	Best Top Buggy (California Make)
21.	David Kerr.....	Best Two-horse Truck
21.	Jerry Lowney & Son.....	Best Coal Cart
21.	David Kerr.....	Best Milk Wagon
21.	David Kerr.....	Best Four-Spring Wagon
22.	West Coast Furniture Co.....	Best Set of Parlor Furniture
22.	Gilbert & Moore.....	Best Bed-Room Set of Furniture
22.	Frank Laermans.....	Patent Combination Furniture
22.	R. W. Taylor.....	Best Sofa-Bed and Lounge
22.	Geo. W. Clark & Co.....	Best Display of Decorative Wall Hangings
22.	J. Fredericks & Co.....	Best Display of Curtains, Cornices and Trimmings
24.	Wakefield Rattan Co.....	Rattan Furniture

Class.	Name of Exhibitor.	Article.
24.	California Wire Works.....	Wire Goods
24.	Figer Bros.....	Best Display of Brushes
24.	John C. R. Lang....	Best Display of Willow Ware
25.	H. N. Cook .....	Best Leather Belting
25.	H. N. Cook.....	Best Leather Hose
25.	Main & Winchester.....	Best Set of Harness
26.	S. P. Taylor & Co...Best General Display of Paper (Cal. Manufacture)	
26.	H. Liebes & Co. ....	Best Display of Furs
27.	Henry Doyle & Co...Best Display of Spool Cotton, "Clark's O. N. T."	
27.	J. Fredericks & Co.....	Best Display of Carpets
27.	Alexander Mackay....	Ingrain Carpeting, Manufactured in the Pavilion during the Fair
27.	J. P. Everts.....	Best Rag Carpet
28.	Jos. Figel.....	Best Display of Men's and Boys' Clothing
28.	Bay City Manufacturing Co.....	Best Display of Hats and Caps
29.	M. Freud & Sons.....	Best Display of Ladies' Corsets
29.	Mrs. L. Mish....	Best Display of Millinery
29.	Adolph Goehring .....	Best Display of Artificial Flowers and their Manufacture
30.	Seal Rock Tobacco.....	Best Display of Tobacco and its Manufacture
31.	G. G. Burnett.....	Best Display of Chemical Preparations and Toilet Articles
31.	Columbia Soap Works.....	Best Toilet Soaps (California make)
31.	F. C. Keil.....	Best Assortment of Perfumery and Extracts
31.	Standard Soap Co.....	Best Display of Candles
31.	California Powder Works.....	Best Sporting Powder
31.	J. T. Bass & Co.....	Best Display of Artists' Materials
31.	J. N. Souther & Co.....	Best Flavoring Extracts and Essences
31.	Whittier, Fuller & Co....	Best Glue (California make)
31.	W. T. Coleman & Co.....	Best Baking Powder, "The Royal "
31.	Henry Lee & Co.....	Best Shoe Blacking
31.	Heuter Bros. & Co...Best Assortment of Varnishes (Cal. Manufacture)	
31.	Pacific Ink Factory.....	Best Display of Inks and Mucilage
31.	Geo. C. Thompson.....	Best Soda Water Draught Apparatus
31.	Whittier, Fuller & Co....	Best Ground and Prepared Colors for Paints
31.	Alfred S. Moore & Co.....	Imperial Silicate Paint
31.	Whittier, Fuller & Co. ....	Pacific Rubber Paint
32.	American Salt Co.....	Best Display of Salt, Crude and Manufactured
32.	Wm. Woodward....	Best Collection of Stuffed and Preserved Animals and Birds
32.	Col. Warren.....	Best Collection of Relics and Curiosities
33.	George Haas.....	Best Display of Confectionery
35.	J. H. Burnell & Bro.....	Albion Ale
36.	Edward Bosqui & Co.....	Best Chromo-Lithography
36.	Sumner Whitney & Co.....	Display of Law Books, their Publications

Class.	Name of Exhibitor.	Article.
37.	E. G. Denniston . . . . .	Silver-Plated Amalgamating Plates for Saving Gold and Silver
37.	W. E. Shepman . . . . .	Best Display of Re-Plated Ware
37.	R. W. Jackson . . . . .	Best Display of Jewelry (Cal. Manufacture)
37.	Geo. T. Marsh & Co . . . . .	Best Display of Japanese Bronzes and Porcelain Ware
38.	Hermann Wenzel . . . . .	Best Pneumatic Clock (his Invention)
38.	John Roach . . . . .	Best Surveying Instruments
38.	V. S. W. Parkhurst . . . . .	Best Display of Scales "Forsyth's"
39.	Wm. Beeman . . . . .	Best Artificial Limbs (Cal. make)
40.	Mrs. P. E. Kramer . . . . .	Best Kensington Embroidery
41.	Mrs. Helen Brodt . . . . .	Porcelain Painting
43.	Henri Gressli . . . . .	Modeling in Plaster
44.	School of Design . . . . .	Original Drawings by the Pupils
44.	C. Eisenschimmel . . . . .	Best General Display of Penmanship and Drawing
44.	Night School—S. F. Public School Department . . . . .	Original Drawings by the Pupils
44.	Sanborn, Vail & Co . . . . .	Best General Display of Pictures
45.	N. M. Klain . . . . .	Best Display of Landscape Photography
46.	E. Meyer . . . . .	Best Display of Plants, Flowers and Ferns
46.	John Pouyal . . . . .	Best Group of Orange and Lemon Trees
46.	J. T. Murphy . . . . .	Best Continuous Display of Cut Flowers
47.	Sol Runyon . . . . .	Best Continuous Display of Fruit.

## BRONZE MEDALS.

1. W. H. Ohmen . . . . . Best Hoisting Engine and ~~Boiler~~ <sup>Boiler</sup> Combined
1. Central Gas Light Co . . . . . Best Caloric Engine, in motion
1. Central Gas Light Co . . . . . Best Gas Engine, "Otto Silent"
1. W. T. Garratt . . . . . Steam Engine Governors and Globe Valves
2. W. T. Garratt . . . . . Best Water Meter, "Worthington's"
3. John Wright . . . . . Improved Pick
3. San Francisco Tool Co . . . . . Best Iron Shaper and Planer
3. San Francisco Tool Co . . . . . Best Engine Lathes
3. F. C. Anderton . . . . . Anderton's Cupola Furnace and Forge Blower
3. San Francisco Tool Co . . . . . Best Milling Machine and Gear Cutter
6. Joshua Hendy . . . . . Best Ore Feeder
6. Adams & Carter . . . . . Improved Tappet
7. Weister & Co . . . . . Best Hand Washing Machine (Complete Washer)
8. J. A. Griswold . . . . . Best Fire Escape
9. A. C. Watts . . . . . Floating Dry Dock (Model)



Class.	Name of Exhibitor.	Article.
11.	Hawley Bros. Hardware Co.....	Best Corn Sheller, "Keystone"
11.	Hawley Bros. Hardware Co.....	Best Fan Mill, "Champion"
11.	D. M. Osborne & Co.....	Best Reaper, "Osborne's Independent"
11.	Geo. Bull & Co .....	Best Riding Cultivator
11.	Hawley Bros. Hardware Co.....	Best Sulky Hay Rake
11.	Byron Jackson.....	Harrow (Pacific Coast Manufacture)
11.	Hawley Bros. Hardware Co.....	Best Hay and Straw Cutter
11.	R. G. Brush .....	Best Grain Cleaner, "California Chief"
11.	T. A. Mudge.....	Best Fruit Canner, "The Wheeler"
11.	Hawley Bros. Hardware Co.....	Best Almond Huller
13.	A. B. Sanford.....	Best Steam and Hot Water Heating Apparatus
13.	Adam Koch. ....	Best Copper Ware (California Manufacture)
13.	De Guerre & De Lano..	Phoenix Adjustable Grate for Stoves and Ranges
14.	Jacobi & Short .....	Best Lemon Squeezer, "Little Giant"
14.	Liddle & Kaeding.....	Best display of Fishing Tackle
16.	Will & Finck.....	Best Display of Combs (Cal. make)
17.	John B. Owens .....	Best Buckingham and Yellow Ware
17.	Gladding, McBean & Co.....	Best Ornamental Chimney Tops
18.	Weed & Kingwell.....	Best Display of Plumbers' Goods
18.	W. Wilson .....	Best Gas Trap for Basins
19.	California Glass Works.....	Patent Glass Roofing
19.	Alexander Akstrand.....	Best Newel Post
19.	R. W. Brehm .....	Articles Turned from California Woods
19.	Louis Dampf.....	Best Passe-Partouts
19.	W. H. Simmons .....	Painted Table Tops
19.	McEachern & Rowe.....	Gold Frame
21.	Carville Manufacturing Co.....	Best Open Buggy (Cal. make)
22.	J. S. Bennett.....	Bed-Room Set of Furniture (Hand-made)
22.	Gilbert & Moore.....	Best Office Desk
22.	Pacific Spring and Mattress Co.....	Best Spring Mattress
22.	Hartshorn & McPhun....	Best Display of Window Shades and Fixtures
22.	Truman S. Clark & Son.....	Best Folding Iron Bedsteads
23.	The J. M. Brunswick & Balke Co... ..	Best Billiard Table Cushions
23.	The J. M. Brunswick & Balke Co ..	Best Billard Tables for Parlor Use
24.	Misses E. L. & M. A. Dietz... ..	Patent Dust Pan and Crumb Receiver
24.	Figer Bros.....	Best Display of Feather Dusters
24.	Figer Bros.....	Best Carpet Sweeper
24.	Whittier, Fuller & Co.....	Best Display of Paint and Varnish Brushes
25.	Main & Winchester.....	Best Saddle and Bridle
25.	Main & Winchester .....	Best Display of Whips
26.	H. Liebes & Co .....	Best Display of Carriage Robes
26.	H. Liebes & Co.....	Best Sheep-Skin Mats
29.	A. Rogers.....	Best White Ostrich Feathers
31.	Dixon Crucible Co... ..	Display of Stove Polish, Lubricants, Pencils, etc.
31.	Geo. C. Thompson.....	Best Soda Water Generating Apparatus

Class.	Name of Exhibitor.	Article.
32.	I. L. Merrill .....	Display of Asbestos Preparations
33.	P. Wulff.....	Best Pickles and Sauces
33.	Francis De Long.....	Best Cider and Cider Vinegar
36.	Geo. Spaulding & Co.....	Best Specimens of Printing
37.	Mrs. A. O. Cook.....	Best Display of Hair Jewelry
38.	R. B. West.....	Improved Eye Glasses and Spectacles
39.	Hinkle & Handy.....	Best Assortment of Appliances for Deformities
39.	A. A. McLean.....	Best Truss (I. X. L. Elastic)
40.	Mrs. E. H. Hubbard... ..	Best Display of Human Hair Goods
40.	Mrs. H. Stettin.....	Gold, Silk, and Cheneille Embroidery
40.	Mrs. A. N. Petersen.....	Best Display of Hand-Made Lace Work
40.	L. Federmeier.....	Pictures made of Human Hair
42.	Miss A. Hassler.....	Porcelain Painting
42.	Miss Eva McCormick.....	Painting on Satin
43.	Henri Cousins.....	Carved Portrait Frame
43.	J. G. Grundel.....	Best Display of Ivory Goods
45.	N. M. Klain.....	Best Stereoscopic Views
46.	Woodward's Gardens.	Second Best Display of Foliage, Plants and Ferns
46.	Thomas Saywell.....	Second Best Display of Cut Flowers

## DIPLOMAS.

1.	H. S. Slocomb & Co.....	The Dibble Drip Lubricator
1.	Llewellyn Steam Heater and Condenser Co.	Steam Heater and Condenser
1.	Weed & Kingwell.....	Eureka Tallow Lubricator
1.	Occidental Foundry.....	Best Grate Bar
3.	Edward W. Tifft.....	Designs for Display of Saws and Tools
3.	C. F. Marwedel.....	Display of Machinists' Small Tools
3.	Pacific Stove and Iron Works..	Vise and Anvil Combined
3.	S. F. Tool Co.....	Best Drilling Machine
3.	J. A. Studebaker.....	Tailor's Square
4.	John Driver.....	Rotary Morticing Machine
4.	John Driver.....	Ratchet Brace
5.	Durkee & Moore.....	Wire Coiling Machine for Mattresses
5.	Louis L. Hall.....	Foot Power Scroll-saw in Operation
7.	Keystone Wringer Co.....	Best Wringer, "The Adams"
7.	Keystone Wringer Co.....	Best Crimping Machine
8.	Sarah Martin .....	Best Ironing Table
8.	H. N. Cook.....	Best Leather Fire Buckets and Hose Pipe
8.	W. T. Garratt.....	Improved Hydrant
9.	J. W. E. Howe.....	Model of a Ship in the Arctic Regions

Class.	Name of Exhibitor.	Article.
9.	Louis Brell.....	Model of a Man-of-War
9.	R. Walkingshaw.....	Improved Ship's Port Window
10.	A. Chopi.....	Darning Machine
10.	E. C. Bodley.....	Victor Sewing Machine
11.	J. S. Woolsey.....	Cheese Vat and Steam Generator
11.	John Wilz.....	Best Pruning Shears
11.	M. C. Hawley.....	Best Lawn Mower
11.	M. C. Hawley & Co.....	Best Sulky Plow
11.	Geo. Bnll & Co.....	Best Side-Hill Plow
11.	Geo. Bull & Co.....	Best Plow for General Purposes
11.	M. C. Hawley & Co.....	Best Cider Mill
11.	Batchelor & Wylie.....	Best Harrow and Cultivator
11.	A. La Jeunesse.....	Improved Harrow
11.	M. C. Hawley & Co.....	Best Feed Mill, "The Challenge"
11.	David N. Hawley.....	Creamer, Churner and Butter Worker
11.	D. M. Osborne & Co.....	Display of Mower and Reaper Knives
12.	Abner Doble.....	Cast Steel Bars
13.	Perry & Co.....	Best Flat-Iron Heater
13.	Weister & Co.....	Best Coal Oil Stove
13.	Chas. Brown & Son.....	Best Range, "The Winthrop"
13.	Mrs. E. M. Spiers.....	Heat Fender and Fruit Dryer
13.	Mrs. C. Woodruff.....	Improved Dish-Washer
13.	J. F. Meyers & Co.....	Best Display of Oil Stoves
14.	G. V. Blackman.....	Gonne's Patent Door Knob
14.	J. S. Benn.....	Artificial Flies
14.	Mrs. F. M. Trueworthy.....	Best Stencil Plates
14.	Frank Webb & Co.....	Rubber Stamps
14.	Frank P. Latson.....	Bronzed Hardware for Buildings
17.	Gladding, McBean & Co.....	Best Fire Brick
18.	Wiester & Co.....	Best Water Filter, "Little Giant"
19.	James Hatch.....	Frame and Bracket done on Shaping Machine
19.	Scovern & McCall.....	Scroll Sawing and Ornaments
19.	C. H. & G. W. Burr.....	Best Weather Strips
19.	J. R. Drew.....	Stair Work
19.	J. W. Linney.....	Paper Files for Holding Papers
19.	Pacific Portable House Co.....	Portable Ventilated House
19.	G. Hansen.....	Step-ladder and Elevator Combined
19.	Mrs. Theresa Corlett.....	Ornamented Table Top
19.	Sanborn, Vail & Co.....	Cabinet Brackets
19.	Pacific Coast Screen Co.....	Patent Window Screens
21.	David N. Hawley.....	Best Two-Wheeled Phaeton
21.	E. Whitmore.....	Best Two-Wheeled Side-bar Phaeton
21.	J. A. Bilz.....	Best Jump Cart
21.	M. H. Landers.....	Man-catcher for Rail Cars
22.	West Coast Furniture Co.....	Best Library Furniture
22.	West Coast Furniture Co.....	Best Easy Chair



Class.	Name of Exhibitor.	Article.
22.	D. E. Guibord.....	Toilet Wardrobe for Ladies
22.	Theodore Erdin.....	Kitchen Cabinet
22.	Gilbert & Moore.....	Best Assortment of School Furniture
22.	Pacific Spring and Mattress Co.....	Best Metal Spring Bed-Bottom
22.	Sumner, Whitney & Co.....	Rotating Book Case
22.	S. H. Herring.....	Rustic Furniture
22.	Fred Rohnert.....	Rolling Top Mattress
23.	The J. M. Brunswick & Balke Co....	Best Billiard Balls, Cues and Racks
24.	Figer Bros .....	Best Brooms, California make
25.	Main & Winchester .....	Best Horse Collar
25.	R. P. Bryant .....	New and Patented Button for Shoes
26.	South Coast Mill, (O'Neil Bros. & Co.).....	Best Straw Paper
26.	H. Liebes & Co.....	Best Sample of Colored Furs
27.	Chas. Peake & Co.....	Turkish Rugs
28.	Jos. Poheim.....	Dress and Business Suits for Gentlemen, and Cloth
28.	J. W. Coppage.....	Machine-Made Button Holes
29.	Mrs. Morrow & Co.....	The Griswold Corset
29.	A. Balny.....	Best Colored Ostrich Feathers
29.	John F. Snow.....	Re-finished Crape
29.	Mrs. M. H. Ober & Co..	Boston and California Dress Reform Garments
31.	Boericke & Shreck.....	Homœopathic Remedies and Books
31.	A. N. Merriman & Son.....	Dental Toilet Articles
31.	Parisian Polish Co .....	Furniture Polish
31.	Pacific Fertilizing Co .....	Fertilizers
31.	Davis & Cooper.....	Oil Blacking
32.	Horace D. Ranlett. ....	Display of Copper Ore from Calaveras County
32.	W. H. Rayburn .....	Compressed Shavings
32.	Mrs. F. V. Hubbard.....	Collection of Curios
33.	J. T. Cutting & Co....	Hazard's Crushed Indian
33.	George Haas .....	Plain and Fancy Candies
33.	B. F. Wellington.....	Assortment of Seeds and Mushroom Spawn
34.	Arpad Haraszthy & Co.....	Best California Brandy, 1880 and 1881
34.	J. Gundlach & Co.....	Best White Wine, Rhenish Type
34.	Arpad Haraszthy & Co .....	Best Angelica Wine
34.	J. Gundlach & Co.....	Best Red Wine
34.	W. J. Hunt.....	Best Blackberry Wine
35.	Wilmerding & Co.....	Peruvian Bitters
35.	Wm. Goepert & Son.....	Export Felsen Beer
35.	J. T. Cutting & Co.....	Falk's Milwaukee Beer
35.	W. J. Hunt.....	Blackberry Cordial
36.	G. W. Hagans.....	Sheet Music, own Publication
38.	R. B. West.....	Best Display of Optical Goods
38.	J. H. W. Riley.....	Calligraph
39.	C. N. West.....	Best Electric Medical Belt
39.	Wm. Beeman.....	Elastic Cork Truss
40.	Harriet F. Bailly.....	Paper Sculpture

Class.	Name of Exhibitor.	Article.
40.	Mrs. N. R. Fox.....	Embroidery Pictures
40.	Mrs. N. P. McPherson .....	Fern and Rock Pictures
40.	Miss May Favor.....	Fancy Needlework
40.	Henry R. Reynolds.....	Skeleton-leaf Pictures
40.	Hattie L. Work.....	Silk Bed Quilt, 6,000 pieces, Satin Cushion, 700 pieces.....
40.	Mrs. Henrietta Lush.....	Bed Spread, Table Cover and Tidies
40.	Mrs. Eliza Prydz.....	Tapestry Work, Rug and Towel
40.	Kitty S. Bryant.....	Worsted Bureau Set and Crocheted Shawl
40.	Mrs. Amanda Dallas.....	Flower Stand of Immortelles
40.	Mrs. P. E. Kramer .....	Cheneille Work
40.	Mrs. C. Seivers.....	Crocheted Tidies
40.	Mrs. Sarah Clark.....	Tapestry Pictures
40.	Miss Bessie Taylor .....	Lace Toilet Set
40.	Mary M. Cherry .....	Worsted Wreath
40.	Miss Julia Durand.....	Holbein Embroidery
40.	Emma J. Cook.....	Vase of Wax Flowers
40.	Mrs. Judith McGowan, (aged 81).....	Sofa Cushion, Satchets, etc
40.	Miss Lizzie Easton .....	Point Lace Work
40.	Mrs. C. B. Browne.....	Fancy Quilt and Fire Screen
40.	Mary E. Allen, (aged 7).....	Lace Shams, Quilt and Dolls' Clothes
40.	Mrs. E. A. Bulfinch .....	Silk and Patchwork Quil
40.	Mrs. B. Taylor.....	Crochet Quilt
40.	Mrs. H. Stettin.....	Fine Embroidery
40.	Mrs. M. S. Statham.....	Tissue Paper Work
40.	Mrs. S. W. Raveley.....	Bed Quilt
40.	Mrs. H. H. Parent.....	Fancy-work and Miniature Furniture
40.	Mrs. J. Morse .....	Linen Embroidery
40.	Little Infants' Shelter.....	Kindergarten Work
40.	Mrs. Juliana Luger .....	Skeleton Leaves and Flowers
40.	Mrs. E. F. Jones .....	Bed-spread, Shams and Stand Cover
40.	Mrs. C. A. Johnson.....	Hand-Knit Quilt
40.	Mrs. M. A. Gardiner.....	Silk Quilt
40.	Miss. P. Gosliner.....	Pillow Shams
40.	Mrs. Howard Fraser.....	Fancy Rug
40.	Mrs. Theresa Frulghi.....	Crochet Quilt
40.	Mrs. M. I. Elder.....	Embroidered Portiere Curtain
40.	Misses E. L. & M. A. Dietz.....	Original Floral Design
40.	Mrs. C. Baker.....	Wax Tartan Flowers and Autumn Leaves
40.	Mrs. Agnes Bowman, (aged 82).....	Hand-made Mats
40.	Great Unknown.....	Silk and Satin Table Cover
40.	Mrs. J. E. Cotter.....	Autumn Leaves and Preserved Flowers
40.	Miss M. A. Oakshett.....	Turkish Rugs and Ottomans
43.	Mlle. Cl. Delabaire.....	Modelling in Clay and Wax
44.	S. & G. Gump.....	Best Steel Engraving
44.	Miss Bertha Christian.....	Pen Drawing

Class.	Name of Exhibitor.	Article.
44.	A. M. Easton.....	Pen Drawing
44.	Miss Lulu Bauer.....	Map Drawing
44.	H. Barkhaus .....	Pen Drawing
44.	Miss Rose Oppenheimer.....	Business Penmanship
44.	Alfred Lipman.....	Business Penmanship
44.	W. S. Coleman.....	Fine Penmanship
44.	Louis Lang.....	Business Penmanship
44.	S. G. Jordan.....	Illuminated Lettering
44.	W. H. Smyth.....	Mechanical Drawing
44.	California Commercial College.....	Pen Flourishing
44.	Heald's Business College.....	General Penmanship
44.	Leszinskys Business College.....	Business Forms
44.	Mrs. B. F. Ingals.....	Medley Pictures
45.	M. Kirkland.....	Photographic Views, Pennsylvania Scenery
46.	John Pouyal.....	Third Best Display of Flowers and Ferns
46.	Thomas Saywell.....	Best Display of Dahlias
47.	Mrs. M. C. McLellan....	Prolific Pear Graft
47.	G. W. Hinclay.....	Mountain Peaches
47.	Munson & Grevies.....	Tuscan Wheat
47.	Eveleth & Nash.....	Exhibit of Mountain Peaches
47.	I. H. Thomas.....	Watermelon
47.	A. Crawford.....	Gravenstein Apples
47.	El Dorado Fruit Co.....	Mountain Peaches
47.	W. J. Hunt.....	Gravenstein Apples and Peaches

## CASH PREMIUMS.

### PAINTINGS.—CLASS 41 AND 42.

Name of Exhibitor.	Amount.
Thomas Hill.....	\$100 00
Wm. Keith.....	100 00
E. Narjot.....	60 00
Mrs. Helen Brodt...	50 00
Wm. Hahn.....	40 00
Theo. Wores.....	40 00
O. Kunath...	40 00
H. Borneman.....	40 00
H. Raschen.....	40 00
Miss A. Hasler.....	35 00
H. Cleenewerk.....	25 00
Albert Jenks.....	25 00
<i>Carried forward</i> .....	<u>\$595 00</u>



## PREMIUMS AWARDED.

129

Name of Exhibitor.	Amount.
<i>Brought forward</i> .....	\$595 00
Nellie Hopps.....	25 00
Arthur Nahl.....	25 00
E. Tojetti.....	20 00
Mrs. Robert Beck.....	20 00
Miss E. Watson.....	20 00
Mrs. A. E. Hatch ..	20 00
L. P. Latimer.....	20 00
Nellie Burrell.....	15 00
Fred. Schafer.....	15 00
Cecil Romer.....	10 00
J. B. Wandesforde.....	10 00
A. Joullin.....	10 00
Wilson Taylor.....	10 00
G. H. Burgess.....	10 00
S. M. Brookes.....	10 00
R. D. Yelland.....	10 00
L. F. Adams.....	10 00
Miss Eva McCormick.....	10 00
A. A. Cooper.....	10 00
S. W. Shaw.....	10 00
A. E. Rogers.....	10 00
Emily Ryder.....	10 00
Ettie Leaman.....	5 00
Mrs. C. E. Danielwitz.....	5 00
Mrs. W. H. Wiester.....	5 00
Mrs. J. H. Holt.....	5 00
Mrs. H. W. Bennett.....	5 00
Frank Capp.....	5 00
J. Z. Dudley.....	5 00
Miss Ettie Seaton.....	5 00
Addie Ballou.....	5 00
Miss Annie Kane.....	2 50
Julia Schulte.....	2 50
Mrs. D. Bixler.....	2 50
Sarah Duprey.....	2 50
Mary E. Home.....	2 50
August Schoeft.....	2 50
Miss N. P. McPherson.....	2 50
Miss M. Oviatt.....	2 50
Amelia Simpson.....	2 50
Mrs. R. J. Fay.....	2 50
Miss Goldwater.....	2 50
Miss E. J. Morton.....	2 50
<i>Carried forward</i> .....	\$980 00

Name of Exhibitor.	Amount.
<i>Brought forward</i> .....	\$980 00
Miss Dutton.. .. .	2 50
Miss Sara H. Fernandez.....	2 50
Miss T. Franklin.....	2 50
Alice Levy.....	2 50
Mrs. M. H. Lovely.....	2 50
Mrs. W. R. Gallagher.....	2 50
Miss M. M. Shepherd .. .	2 50
Miss Curry.....	2 50

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\$1,000 00

FLOWERS AND PLANTS.—CLASS 46.

E. Meyer.....	\$120 00
Woodward's Gardens.....	80 00
John Pouyal .. .	50 00
J. T. Murphy.....	40 00
T. Saywell.....	40 00

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\$330 00

FRUIT.—CLASS 47.

Sol. Runyon.....	\$75 00
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# REPORTS

—FROM—

## STANDING COMMITTEES

—OF THE—

# INDUSTRIAL EXHIBITION.

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### HORTICULTURAL GARDEN.

By the recent completion of the New Exhibition Building, the permanent fittings, fixtures and improvements in this department, such as the building of the lake, and placing in position the necessary water and drain pipes, the building of the rockery, transplanting of plants, flowers, etc., and the garden soil, would seem to belong more properly to the first cost of the Exhibition Building, in which case the only expense incurred in this department is the wages of the gardener, Mr. Thos. Saywell, he having worked forty-seven days, at a salary of \$3 00 per day, making in all \$141 00.

Respectfully submitted,

A. W. STARBIRD,  
GEO. H. HOPPS  
J. R. WILCOX,  
Committee.

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### TICKETS AND ADMISSIONS.

YOUR Committee on Tickets and Admission respectfully present the following report:

The Season Checks this year were ready for distribution earlier than usual, and a man was employed by your Committee to leave them for sale at most of the respectable stores in the business part of the city. The result was very satisfactory; but for a detailed statement of the number sold, and by whom, we refer you to the Treasurer's Report.

The *Season Ticket* used was the identifying Coupon Ticket, similar to the one in use during the Fifteenth Fair. This was found to work well, effectually preventing repeating and personating, being at the same time portable and easily worked by the door-keepers. The only objection to be urged against this form of ticket is its costliness. If any ticket can be contrived that will possess the advantages of the Coupon ticket at less cost, your Committee



would gladly see it adopted. During the extra week of the Fair, the coupon stubs being exhausted, the admissions were registered by punching the back of the coupon book in a different place for each day. It was found that this could be done easily and rapidly. A ticket like the Ferry Commutation Ticket, which registers admissions by punching round the margin, has been used by the management of the Authors' Carnival, and appeared to work well; but the Carnival Ticket only provided for twelve admissions, while the Fair Ticket must provide for sixty. The experiment is not decisive.

An attempt was made by your Committee to prevent the abuse of Press tickets, which has prevailed at former Fairs, by issuing identifying tickets to reporters. The difficulties in the way, however, were found to be insuperable, and after a brief trial the project was abandoned as impracticable, and the old form of Press tickets issued. Besides the Complimentary tickets to editors and proprietors, twenty-one Double Season tickets and one hundred and nineteen ordinary Reporters' tickets were issued to representatives of the Press.

The *Employees' Tickets* were issued by the Superintendent, under the direction of the Committee; the number so issued was 1,500. The admissions were registered by punching around the margin.

The *Complimentary Tickets* were, as usual, issued by the President only.

No *Excursion Tickets* were printed this year. The plan was adopted of giving admission at half rates only, in the case of *bone fide* excursions under the management of the Railroad Companies themselves, who were required to guarantee at least \$100 to the funds of the Fair, and to print the Admission Ticket to the Fair as a coupon to their own ticket, redeeming them on presentation. The results of this policy were excellent. Three excursions were undertaken in this manner, one by the Southern Pacific Railroad from San Jose, the receipts from which were \$252 10; one by the South Pacific Coast Railroad from Santa Cruz and way stations, from which the receipts were \$252; and another by the S. F. and North Pacific Railroad from Cloverdale and way stations, from which the receipts were \$197; making the total receipts from the three excursions \$701 10. Your Committee heartily recommends this as the most satisfactory method of getting up excursions.

The expenses were as follows:

5000 Double Season Checks .....	\$ 15 00
1500 Single Season Checks .....	5 00
1000 Children's Season Checks .....	3 00
1000 Apprentices' Season Checks ..	3 00
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	\$ 26 00
4000 Double Season Tickets—Coupon.....	\$160 00
1500 Single Season Tickets—Coupon.....	60 00
1000 Children's Season Tickets—Coupon .....	40 00
1000 Apprentices' Season Tickets—Coupon.....	40 00
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<i>Carried forward</i> .....	\$326 00

<i>Brought forward.</i> .....	\$326 00
5000 Adults' Single Admission Tickets—Card.....	\$ 15 00
2000 Children's Single Admission Tickets—Card.....	6 00
400 Press Tickets—Card.....	4 50
1500 Employees' Tickets—Card ..	4 50
500 Complimentary Tickets—Card.....	8 00
50 Keys to Tickets.....	1 50
2000 Single Admission Tickets (extra, not used).....	8 00
Printing on back of 8500 Tickets.....	8 50
Printing endorsement on 16,927 Tickets.....	12 75
	<hr/>
	\$ 68 75
	<hr/>
	\$394 75
Doorkeepers: Sergt. Harman .....	\$125 00
2 Regular Doorkeepers, 35 days .....	210 00
2 Extra Doorkeepers .....	54 00
	<hr/>
	\$389 00
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Total.....	\$783 75

In conclusion, your Committee gives hearty thanks to those members of the Board by whom assistance was cheerfully rendered during the Fair.

All of which is respectfully submitted,

EDWIN FRETWELL,  
C. F. BASSETT,  
DAVID KERR,  
Committee.

### LOCATION.

YOUR Committee, to whom was referred the locating of the different industries applying for space in the new Mechanics' Pavilion, beg leave to report as follows:

The Pavilion having been divided into two parts, the portion for heavy machinery was partitioned off from the main Pavilion, the latter being reserved and set apart for other exhibits. The plan of the interior of the Exhibition Building adopted by your Committee was placed in the hands of the Superintendent, with power to modify according to the wants of exhibitors, or when in his judgment he deemed the change desirable to meet the wants of the other interests connected. These, with your Committee, find that Mr. Gilmore, the Superintendent, has ably carried out their instructions, with but small change or modification from the original plan, he having done all in his power to meet the requirements of the exhibitors, and satisfy all. There has been no expense incurred by your Committee except for labor, and that item has been always included in the pay-roll of the employees.

Respectfully submitted,

D. A. MACDONALD,  
GEORGE SPAULDING,  
A. R. WELLS,  
Committee.

## MUSIC AND DECORATIONS.

YOUR Committee on Music and Decoration would report that the Musical part of the Exhibition has been this year much more satisfactory to the public than previous ones, owing to the Machinery hall having been partitioned off from the main building, thereby allowing listeners to hear the harmony without a mixture of sound produced by pounding Quartz Mills and rattling wheels.

The contract for the Music was awarded to Schultz and Ballenberg, who gave the utmost satisfaction. This Orchestra was composed of the best musicians attainable in the city, among them being some noted soloists whose pieces were usually most heartily encored. The opening overture was composed and dedicated to the Board of Managers by Mr. Charles Schultz, the Conductor. The music has now become one of the chief attractions of our Fairs, and is expected by the patrons as much as fine exhibits. The cost of this department was \$2,756.

The Decorations this year have not been very expensive or elaborate, the new Pavilion in part compensating for the lack of bunting and flags usually displayed. The principal embellishment was a stripe of red, six feet wide, running entirely around the building above the gallery, and two large fan lights, also red, over the arched windows at each end of the Pavilion. The effect was to harmonize and relieve the eye from the uniform whiteness of the interior.

The tables in the gallery and garden were covered with cloth of uniform color, making them appear much better than formerly. The entire cost of decorating this year has been but \$118 05.

Respectfully submitted,

J. A. BAUER,

G. H. HOPPS,

A. W. STARBIRD,

Committee.

## PRIVILEGES.

WE, the Committee on Privileges, are gratified in being able this evening to present you with a report showing a decided increase of receipts over last year, notwithstanding the smoking room was omitted from the list, and also to state positively, that all holders, without exception, were perfectly satisfied.

The question of the advisability of granting Privileges of sale for anything except refreshments, is one not easily settled, and of which there is much difference of opinion.

On one side is the fact, that it is a rule or custom in all the large exhibitions held in the United States, to dispose of to the highest bidder, or at a fixed sum, various exclusive privileges of sale of articles possessing novelty or attractiveness to the general public, as it is claimed these fairs are where they are first exhibited to the public, and the only place where visitors could purchase an article they greatly desired, and would feel disappointed if not permitted to do so.



On the other hand, the remark has been heard that fairs are gradually being turned into a great bazaar, and the proper aim and object of an Industrial Exhibition lost sight of, and people importuned and annoyed by persistent invitations to purchase articles they do not want.

In awarding our contracts for Privileges, it was distinctly understood that no soliciting of patronage could be done, except from the stand of the holder, and then only to persons voluntarily seeking information.

In our own case we do not think it has been detrimental, and need never be, if properly conducted under strict rules and regulations.

The question of a side show with entrance from the Pavilion, engaged the attention of the Committee for some time, but which was finally allowed with satisfaction to the public, and we trust to the Board of Managers also.

The following Privileges were sold:

Ice Cream, Kate S. Hart.....	\$ 900 00
Printing, George Spaulding & Co.....	550 00
Soda, Geo. C. Thompson.....	927 50
Cider, Geo. C. Thompson.....	327 50
Lunch Counter, D. S. Ciphers.....	125 00
Pop Corn, D. S. Ciphers.....	266 00
Candy, Geo. Haas.....	777 00
Fruit, Mrs. J. Muirhead.....	35 00
Hair Tonic, Mrs. Reeves.....	25 00
Perfumery, { F. C. Keil.....	25 00
{ G. G. Burnett & Co.....	25 00
{ Mrs. Whitney.....	10 00
Oriental Articles.....	25 00
Waffle Stand, J. Lantheaume.....	50 00
Automatic City, Col. Gildersleeve....	700 00
Japanese Goods, { Ichi Ban.....	25 00
{ G. T. Marsh & Co.....	25 00
Soap, Columbia Soap Works.....	25 00
Card Writing, E. A. Goddard.....	25 00
Cement, W. Flannery.....	25 00
Canes, J. H. Kruger.....	25 00
Music, G. T. Hagans.....	15 00
Stamps, Richardson Bros.....	25 00
Dental Preparations, A. F. Merriman & Son.....	25 00
Hair Remedy, A. F. Forbes.....	25 00
Toilet Articles, Stoddart Bros.....	25 00
Microscopes, S. M. Armstrong.....	25 00
Fruit Salt, H. B. Slaven.....	25 00
Gas Stoves, etc., Central Gas Light Co.....	355 86
<b>Total,.....</b>	<b>\$5,503 86</b>

Respectfully submitted,

DAVID KERR,  
C. WATERHOUSE,  
D. A. MACDONALD,  
Committee.

## GAS AND WATER.

YOUR Committee on Gas and Water would report that all matters pertaining to laying gas-pipe and putting in the fixtures used at the new Pavilion properly belongs in the report to the Mechanics' Institute, and will not be mentioned here. Regarding the present Fair, we are pleased to state that the cost of Gas has been very materially reduced from what it has been at former fairs, owing to the strong competition of the Central Gas Light Company, whose Gas was used, and gave good satisfaction, the light at all times coming up to the official standard candle power, and of the best illuminating quality.

This Company, through its gentlemanly Superintendent, Mr. Condict and efficient employees, did everything possible to save expense and labor to the Institute, and were willing at all times to comply with the wishes of the Managers. Their exhibit of Gas and Gas Apparatus was a very attractive one, showing the many and useful purposes, besides lighting, in which Gas can be economically used.

The Electric Light was only used to illuminate the front of the building outside, where, as usual, it gave good satisfaction; in fact, it would be hard now to dispense with the light in such places, where crowded cars are constantly arriving and departing.

The Fair remained open thirty-five days, the same as last year.

The amount of Gas consumed last year was 1,167,300 cubic feet, costing, at \$2 50 per M., \$2,918 35. This year there was consumed 790,800 cubic feet, costing at \$1 80 per M., \$1,423 45, a saving of \$1,494 90 as compared with last year. The Electric Light last year cost \$315; this year \$156, saving \$159, and showing a saving in cost of light of \$1,653 90. The average cost of Gas per day has been \$40 67; even the comparatively small cost of Gas used this year was in excess of what it should be in the future, as the arrangement of the burners in the Art Galleries was such as to give the least possible effect where most needed; a defect that could not well be remedied during the Exhibition, but should be before the next.

Whitening the interior has also been of service in increasing the light, rendering the Pavilion much more brilliant at night than heretofore.

Previous to the opening of the Exhibition, a majority of the Trustees of the Institute concluded that it was advisable to dig an artesian well on the premises, thereby expecting to obtain water to supply the Pavilion. To that end, a well was sunk 201 feet, but not in time to be available, and the Spring Valley Water Co. supplied the water for all purposes at a cost of \$100 per week.

The expenses in our department has been

For Lighting . . . . .	\$1,606 45
" Water . . . . .	583 35
Total . . . . .	\$2,189 80
Less amount received from Exhibitors for Gas used . . . . .	117 50
Total . . . . .	\$2,072 30

Respectfully submitted,

J. R. WILCOX,  
JAMES SPIERS.  
C. WATERHOUSE,  
Committee.

## PRINTING AND ADVERTISING.

YOUR Committee on Printing and Advertising would report that the expenses of their department for this Fair have been as follows:

Advertising.....	\$1,219 20
Printing.....	924 65
Stationery .....	142 53
Total.....	<u>\$2,286 38</u>

An itemized account will be given in the Financial Report of the Exhibition. There is much to say and a wide difference of opinion as regards the amount of advertising necessary to secure the greatest amount of good to the exhibitors. We have been as liberal as we deemed advisable, and believe the money so paid was well expended. The press, without exception, has been very kind this year by giving to the public full accounts of the Exhibition. The thanks of the Managers are due to the many city and interior papers for their liberal and flattering notices.

GEORGE SPAULDING,  
EDWIN FRETWELL,  
C. F. BASSETT,

Committee.

## RULES, REGULATIONS AND AWARDS.

YOUR Committee on Rules, Regulations and Awards would report that in accordance with instructions from the Board, an invitation was extended to artists to submit designs for a new Medal and Diploma, twenty-five dollars being offered for the one accepted for the Medal. Several were received, and, after due consideration, the design submitted by Wenzel, Rothchild & Hadenfeldt was accepted. The Diploma was awarded to Britton & Rey. The engraving of the die was submitted to A. Kuner, who has performed his labor to the satisfaction of the Committee—the Medal being a creditable and artistic piece of work, and will, no doubt, be greatly appreciated by those receiving them. The manufacture of the Medals by Wenzel & Co. is rapidly progressing, and it is expected they will be ready in a short time. The Diplomas are printed, nearly all engrossed, and ready for delivery. The medal is one-quarter of an inch larger than the old one, but, being better engraved, can be made for about the same cost as the last. Appended is the cost of the premiums this year:

PREMIUMS—Britton & Rey, design for 200 diplomas...	\$ 100 00
Cash awards for flowers.....	330 00
Cash awards for fruit.....	75 00
Cash awards for paintings.....	1,000 00
Kuner, A., engraving die for medal..	250 00
Muhs, A., 240 boxes for medal.....	102 00
Thors, S., filling out diplomas.....	24 50
Wenzel, Rothchild & Hadenfeldt, new design, 29 gold, 136 silver, 82 bronze medals, and engraving same.....	<u>2,015 30</u>
	\$3,896 80

RICHARD GRAY,  
A. W. STARBIRD,  
JAMES SPIERS,

Committee.

November 9th, 1882.











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